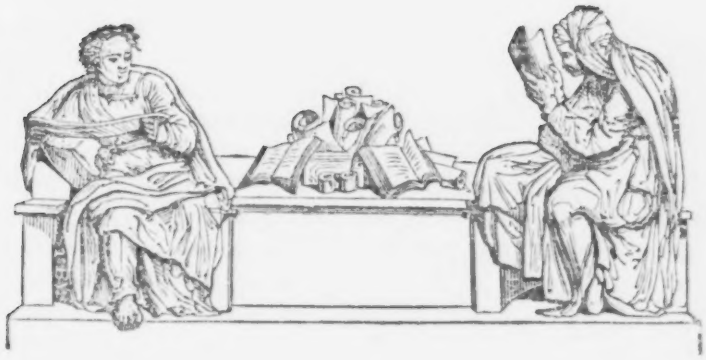

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LIFE OF LORD HILL.

From the North British Review.

The Life of Lord Hill, G. C. B., late Commander of the Forces. By the Rev. Edwin Sidney, A. M., Author of the Rev. Rowland Hill, and Sir Richard Hill, and Chaplain to the Viscount Hill. London, 1845.

There are few departments of literature which are more pleasing and instructive than biography. Especially in perusing the Life of any man who has been gifted with great qualities by nature, and exposed, in his career, to difficulties and dangers which he has braved and surmounted, we experience an emotion of the liveliest kind. It may be that the distance is a wide one between the subject of the biography and the reader, both in rank and in habits and education. But all these adventitious circumstances avail not even to diminish the deep interest of the reader, arising from that strong sympathy which knits together the whole family of man: and thus it is, that the peaceful civilian hangs in breathless suspense over the fate of the soldier in battle, though he himself expects never to see war but in description; and the student, by his fireside, devours the adventures of the daring voyager, though he has, perhaps, no purpose of ever straying from his own home.

It has long been a proverbial truth, that no teaching possesses equal force with the teaching by example; and this is precisely the biographer's method of teaching. The due execution of his task may therefore be a matter of much delicacy, where foibles or vices, having been interwoven dangerously with great talents and virtues, require to be carefully separated from them, and to be made the subject of faithful warning and reproof. But the duty is less arduous, as well as more agreeable, when a biographer is so fortunate, as Mr. Sidney has been, in the choice of his subject, and when his chief aim becomes merely that of giving to his countrymen such a delineation of an amiable and noble character, that the nation—and especially the generous youth of the nation—may admire as they read, and unconsciously prepare themselves, when called on, to imitate what they admire.

We think this has evidently been the aim of Mr. Sidney, and that to a very considerable extent he has succeeded. No one can read his volume without being impressed at the close of it, with

equal respect and admiration for the character of Lord Hill. But we cannot help feeling, that a narrative, embracing so many scenes of adventure, and so many great achievements, would have yielded more instruction and entertainment to the student of Lord Hill's Life, if a fuller statement had been generally given of his individual concern in the chief of these. We observe, indeed, that Mr. Sidney, in his preface, appears to refer to official despatches, as containing the particulars of Lord Hill's military exploits. But these do not, in our estimation, supersede the necessity of exhibiting in the life of Lord Hill, at least the more interesting details of his own personal share in the great campaigns in which he played so conspicuous a part. Nor do we conceive that Mr. Sidney himself viewed them in that light. Yet we fear he has trusted more than enough to this supplementary reading; or else he is unconscious how unsatisfactory is the meagre representation which he gives of some of the most interesting passages in the life of Lord Hill, in which his achievements may be said to have been catalogued by his biographer, rather than narrated.

Take, for instance, the important battle of the Nive or St. Pierre. The battle was, by the common consent of both the French and the English armies, one of the most bloody of the whole war. It was also one of the most glorious to Lord Hill, who fought and gained it with his own troops alone, against one of the ablest of the French commanders, Soult, who vigorously assailed him with a force of nearly thrice his numbers. The events of the day were full of vicissitude, and were repeatedly ominous of disaster, calling forth all Hill's talents, not merely as a skilful general, but also as a brave soldier. In any circumstances, it must have been a most arduous task to sustain the eager attacks of the French, confident in their valor, their numbers, and their leader; but, unhappily, the astonishing misconduct of two British colonels, in different parts of the field, who withdrew their respective troops from action at the most critical moment, unexpectedly aggravated the difficulties of Hill's position to such a degree, that, with an inferior leader, all would have seemed irrecoverably lost. He had stationed himself on a mount, in the rear of his troops, from which he could descry the movements of the contending forces. In the instant of discovering this disaster, he flew to one of the regiments who had been thus betrayed, and who were burning to wipe off the disgrace, and with that regiment, supported by some other troops, he retrieved the wavering battle by a bold and vigorous charge, headed by himself. All this we learn from Colonel Napier, writing the general history of the war: and all this, at least, should have been contained in any biography which was to do full justice to Lord Hill, and to show the British army with what intuitive promptness he could meet those sudden emergencies in which the indecision of a moment might have cost the loss of a battle, and with what varied resources both of prudence and daring he could bear up against apparently overwhelming dangers, until at length he compelled reluctant Fortune to his standard, and snatched a brilliant victory, as it were, out of the very jaws of defeat.

Upon this memorable battle there are but a few sentences bestowed by Mr. Sidney (p. 267) which intimate, indeed, that Soult made a desperate attack, and that he was gallantly repulsed by Lord Hill, and suffered severely; but which tells us little more than this. It is from other sources that the admirers of Lord Hill must gather those particulars which justly entitle Napier to say, in concluding his observations on this battle, after having narrated not merely its result, but Lord Hill's personal share in achieving the victory, that it was gained by him "after a manner that, in less eventful times, would have rendered him the hero of a nation."*

We shall make but one other prefatory remark. We regret to observe occasional instances of the bad taste in writing which mistakes the turgid for the sublime; and we must add, that while contemplating the rare modesty and simplicity of Lord Hill's character, we are the less prepared for such a style on the part of his biographer. Indeed the indulgence in that style tends to defeat the laudable object with which it has evidently been adopted, of giving greater force to noble sentiments. When, therefore, it was the praiseworthy purpose of Mr. Sidney to condemn atheism and infidelity in the most forcible terms, he would have succeeded better by the use of language fitted to convey some definite meaning, than he has done in saying that through them "all that is destructive as-

* Napier's Peninsular War, vi., 409.

sumes a giant form of rank luxuriance, poisoning the air and veiling the light, whence a darkness covers the heavens, broken only at intervals by the lightning-flash and thunder-peal of anarchy and woe."—p. 21.

But we hasten from these few prefatory observations which we have felt it our duty to make, and we shall now give a short sketch of the life of Lord Hill, accompanied with such extracts from the work of Mr. Sidney as appear to be most interesting.

The late Rowland Lord Viscount Hill, was born at the Hall, in the retired village of Prees in Shropshire, on the 11th of August, 1772, and was thus the junior by three years of Wellington and Napoleon, both of whom were born in 1769. His family was old and respectable. Among his ancestors was that Sir Rowland Hill who was the first Protestant Lord Mayor of the city of London. That worthy gentleman appears to have distinguished his civic career by his charitable munificence, and his shrievalty by a contest with the House of Commons, who committed him to the Tower for an alleged infringement of their authority, in over-zealously asserting the privileges of the city.

At the birth of Rowland Hill, and for a long period afterwards, his father was himself a younger brother, though he ultimately succeeded to the family baronetcy and estate. He had sixteen children, of whom ten were sons. Rowland was the second son. Two of the sons died in childhood. Most of the others entered the army, and their father was spared to see five of the number, all of them gallant men, survive the dangers of the Peninsular war, and the bloody field of Waterloo.

Rowland was first at school at Ightfield, a Shropshire village, and thence, at the age of seven or eight, he was sent to Chester, where he won the affections of his school-fellows in a remarkable degree. This arose not merely from his affectionate and gentle disposition, but from the gallantry with which he was always ready to assist any comrade who had got into a scrape, at the same time that he was himself the least likely to be involved in one on his own account. At this period of life he was of delicate constitution, and he was thus thrown more than usually upon the immediate care of Mrs. Winfield, wife of one of the masters of the school. It is one of the delightful traits of Hill's character, that the grateful affection which he then felt for this amiable lady, continued an enduring sentiment in after life, and was repeatedly exhibited after the delicate school-boy had grown up into one of the most renowned warriors of his time.

It is interesting to learn that the same love of horticulture, and the same fondness for pet animals, which characterized him in after life, were already exhibited by him when at school, where his little garden prospered, and his little favorites throve, better than those of any of his companions. But there is another characteristic of his, which comes with something like surprise upon those who have been in the habit of associating the name of Hill so closely with the battle-field.

"His sensibility," says Miss Winfield, "was almost feminine. One of the boys happened to cut his finger, and was brought by Rowland Hill to my mother to have it dressed; but her attention was soon drawn from the wound to Rowland, who had fainted."

And even after his military career had commenced, when it happened that a prize-fight between Humphries and Mendoza was exhibited near the windows of his lodgings, such was the effect produced on him by the brutality of the scene, that he was carried fainting out of his room. So little does there require to be in common, between the most heroic courage and the coarse and vulgar attribute of insensibility to the sight of blood and suffering. He explained afterwards, in reference to the carnage which he had witnessed in war, that he had still the same feelings as at first, "but in the excitement of battle all individual sensation was lost sight of."

In the spring of 1790, his parents called his attention to the necessity of choosing a profession, and indicated a wish that he should adopt that of the law. His reply, addressed to his mother, has been preserved, in which he states modestly and gently his "dislike to the law," and says, "the profession which I should like best, and hope you and papa will not object to, is the army." This called forth a letter from his father, full of good sense and kindness, which we wish we could extract for the benefit of parents who may be thwarted by a son's disinclination to civil life.

Shortly after this an ensigncy in the 38th regiment was procured for young Hill, who also obtained leave of absence to go to

Strasburgh, where he attended a military academy, and remained till 1791. In that year he obtained a lieutenantcy, and soon afterwards returned to England. In 1792 he was with his regiment, the 53d, in Scotland. In 1793 he raised an independent company, chiefly in Shropshire, and obtained a captain's commission. He was desired to carry this company to Ireland, and Mr. Sidney takes occasion to mention the following rather curious anecdote in connection with his visit to that country.

"I remember his telling me, that on going to the house of an eminent literary gentleman, to pass a night, he was shown to his room before dinner, and being about to dress, he looked round for the usual washing apparatus, but could see nothing of the sort. Just as he was on the point of making an effort to obtain these requisites of the toilet, he heard to his great surprise and amusement a creaking in the floor and a trap-door gradually opened, through which ascended, by a steady invisible movement, wash-hand-stand, basin, towels, hot water, and all other due accompaniments. He used to say he never met with a parallel to this, except in the house of a gentleman who had *a railroad made from his kitchen to his dining-room, to send in the dishes quick and hot.*"

This latter sentence points out a new field of utility for railroads, and one which, we will venture to say, has never yet been conjectured even by Mr. Stephenson himself.

At the siege of Toulon, Captain Hill had repeated opportunities of distinguishing himself, which he embraced and improved. On one of these occasions he made a very narrow escape. Having ascended a tree for the purpose of observing the movements of the enemy, General O'Hara, on whom he was in attendance, had occasion to call him down. His place was taken by his brother aide-de-camp, Captain Snow, who was immediately shot in the tree and mortally wounded. Hill himself was slightly wounded in the right hand, and O'Hara was wounded and made prisoner.

It was at Toulon that Hill became acquainted with the celebrated Thomas Graham, afterwards Lord Lynedoch, who served there as a volunteer, and laid the foundation of his future renown. In the following year, 1794, Graham raised a regiment of infantry, and offered Hill the majority of it, on condition of his raising a certain quota of men, which he did. The regiment thus raised was the 90th, which was destined afterwards to be most honorably associated with the name of Hill.

In 1796, Hill, now holding the rank of lieutenant-colonel, went with the 90th to Gibraltar, then commanded by his old friend General O'Hara. Whilst here an incident occurred which not only showed the confidence of his commander, in intrusting him with a mission of importance and delicacy, but also the intense ardor with which Colonel Hill devoted his whole energies to the performance of the duty, whatever it might be, with which he was charged for the time. General O'Hara despatched him with a verbal communication for the British ambassador at Lisbon, announcing expected war with Spain. So rapidly was this anticipation realized, that, in the words of Colonel Hill himself, "Before I could return, hostilities had commenced, and it was with difficulty I got back to the garrison of Gibraltar—not only from the declaration of war, but also in consequence of the illness occasioned by great exertion to accomplish the duty I was employed on for my respected general." The same spirit which prompted Hill, in the discharge of a most unostentatious duty, to sacrifice health itself, in order to accomplish his mission, also animated him in the camp, on the march, or in the battle-field, and gives the true key to the secret of the remarkable success which afterwards so often crowned his enterprises.

In 1800 he was raised to the rank of colonel, and, with the 90th, he formed part of the troops who were employed under Abercromby in the expedition to Egypt. During a rendezvous of the troops at Gibraltar, Colonel Hill, being indisposed, was forbidden to eat any thing but fresh meat. And he used to mention afterwards, that the price of such meat was at that time so excessively enhanced, that he was obliged to give £3, 12s. sterling for a turkey, and £1, 1s. for a fowl. An invalid's impatience to get well could scarcely fail to be stimulated by the cost of a diet like this. But a still more remarkable circumstance, in connexion with *diet*, is mentioned as having occurred during this expedition. For it appears that, in consequence of some freak, apparently by way of burlesque on the deficiency of provisions, "a pair of boots were dressed, boiled, and roasted with lemon, for dinner in the gunroom." Unfortunately it is not stated how much of this dish was eaten, or whether the guests

satisfied themselves that, in the event of their being exposed to short commons during a siege, they might rely, as a last resource, upon their boots if dressed with lemon.

Even during the voyage, we find Colonel Hill diligently studying the theory of field fortification, and improving himself in his profession. He also kept a pocket-journal, in which he regularly noted down what seemed most worthy of attention. Traits like these well deserve to be noted, in connexion with that which has been just commented on, as both explaining and ennobling the success and advancement of Colonel Hill. It was neither to mere talent nor yet to mere fortune, that he was indebted, but to talent, diligently improved by sedulous culture. It is of such talent only that Fortune will generally be found the handmaid.

The notice given of this part of Colonel Hill's history is brief. But we learn from his diary, that he landed in Egypt on the 8th of March, and that

"On the morning of the 13th, at six, the British army began to move, the 90th regiment as its advanced guard. At this moment a considerable body of cavalry made a spirited and impetuous charge on the 90th, who, as Walsh says, with the coolness and intrepidity of veterans, received them, unbroken, upon the points of their bayonets. The French were obliged to retreat. I was wounded by a musket-ball, which struck the peak of the helmet now at Hawkstone. After being wounded, I was taken on board Lord Keith's ship, where I remained about three weeks, and then returned to the regiment."—pp. 39, 40.

While confined by his wound, Colonel Hill was on board the Foudroyant, commanded by Lord Keith. And after the great victory of the 21st of March, in which Abercromby received his mortal wound, he was brought from the field of his fame to the same cabin where Hill was recovering, and where Abercromby lingered for a week and died.

In 1803, Colonel Hill, at the age of thirty-one, was promoted to the rank of brigadier-general, and, until 1805, was employed in Ireland, then menaced with invasion, at the same time that it was the scene of much internal excitement. The various duties devolving on General Hill required not merely courage and energy, but often in a still higher degree called for the exercise of discretion, temperance, and forbearance. In none of these qualities was he found wanting; and he appears to have uniformly discharged the responsible trust which devolved on him in such a manner as to deserve the gratitude of the country.

Among the numerous alarms of invasion which were then propagated from time to time, one is mentioned which may almost vie with the celebrated bonfire "on the hill above Glenwithershins," to which the Antiquary has given a deathless renown. It would appear that Killala Bay, in the north of Connaught, was one of the spots which excited apprehension, as being likely to afford a landing-place for the French. And sure enough, in October 1803, the scouts in that quarter did observe two frigates enter the bay, and speedily lower from their decks what seemed to be boat after boat, which made directly and rapidly for the beach. A report was immediately transmitted that the French troops had arrived, and were disembarking; and farther, that "*they were landing very fast.*" It appeared on inquiry, however, that the two vessels were English frigates, which had entered the bay together for the purpose of watering. For facilitating their operations, they had each heaved their empty water-casks overboard, and the wind carried them quickly to the shore. But still more quickly had the rumor of the *landing* preceded them, and much alarm was excited, and various movements were made for the purpose of repelling the supposed invaders, before the true state of the fact was communicated throughout the country.

It was in 1805, and while preparing for the abortive expedition to the Weser, that Hill first met with Wellington, then Sir Arthur Wellesley, who was also appointed to a command in the same expedition. Sir Arthur dined with him, "at his lodgings at Mrs. Chitty's," at Deal; and that acquaintance commenced, which was destined to have so powerful an influence on Hill's subsequent career.

After spending the year 1806 in England, during part of which he was encamped with a portion of the troops who were kept in readiness to repel threatened invasion—and spending the year 1807 again in Ireland—he was ordered, in 1808, to join the troops then destined for the continent, under Sir Arthur Wellesley. On learning that General Hill was to serve under him, Sir Arthur wrote him on 23d June 1808,

"My dear Hill—I rejoice extremely at the prospect I have before me of serving again with you, and *I hope we shall have more to do than we had on the last occasion on which we were together.*"—p. 75.

The "last occasion" here alluded to was the abortive trip to the Weser; and assuredly the hope of Wellington was gratified before the close of the Peninsular war, which was now about to commence.

It is not without surprise that we learn that British troops were only relieved of so cumbrous an appendage as their queues or pigtails in this year 1808, after the arrival of Sir John Moore from Stockholm. The order to cut off the queues "was dated 24th July, and gave universal delight. The signal was made for all hair-cutters to proceed to head-quarters; and Cadell tells us, 'As soon as they had finished on board the head-quarter ship, the adjutant, Lieutenant Russell, proceeded with them and a pattern-man to the other troop-ships. The tails were kept till all were docked, when, by a signal, the whole were thrown overboard with three cheers.'"—p. 36.

Soon after the landing of the British forces at Mondego, the battles of Rolica and Vimeiro followed, in which the British army had a foretaste of the laurels which they were to earn under Wellington. Major-General Hill was present at both of these battles, and in the former had an active and important share. He was afterwards mentioned by name among the officers to whom, along with Wellington, the thanks of both Houses of Parliament were voted for their services.

The superseding of Wellington, the Convention of Cintra, the expedition of Moore, and the victory of Corunna, won at the expense of that hero's life, belong more to general history than to the biography of Hill. But it may be observed, that it was on General Hill's brigade that the important duty devolved of protecting the army, at its embarkation for England, after the battle of Corunna. On their arriving at Plymouth—where the troops, who had suffered so many privations in the retreat, experienced the utmost kindness from the inhabitants—General Hill was conspicuous for the consideration and solicitude which he showed for the welfare of his men. His name was long remembered with admiration, on that account, by the inhabitants of Plymouth; and this is a trait in the character of Hill which is well worthy of attention, especially from the military student of his life. By his care to avoid exposing the lives of his men unnecessarily, and by his attention to their comforts and wants, he gained so completely their affection and confidence, that when occasion required, he could rely implicitly on the zeal and devotion with which they were ready to follow wherever he led the way.

Before his return from this expedition, his uncle, Sir Richard Hill, had died, and been succeeded by his father, now Sir John Hill. His uncle bequeathed to him the property at Hardwick Grange, which he continued afterwards to occupy as his favorite residence, when at home.

After a very brief period spent in England, General Hill was again despatched to the Peninsula, where he had not been many weeks when Wellington achieved the brilliant exploit of crossing the Douro in the face of the French army under Soult, and driving them, with great loss, from Oporto, and beyond the limits of Portugal. In the action at Oporto, General Hill had a very conspicuous share.

The French had broken down the bridge over the Douro, a deep and rapid river, on the right bank of which the town of Oporto stands; and it had become important, as Wellington's despatches bear,* that the British troops, who had reached the left bank, should cross the river to expel the French without delay.

On ascending the height of the Sarea on the left bank, where there was a convent, opposite to Oporto, Sir Arthur Wellesley descried a large unfinished building, called the Seminary, which stood near the river on the Oporto side. It was surrounded by a high stone wall which came down to the water, on either hand, and which had only one entrance by an iron gate, opening on the Vallonga road. There was sufficient space included within the wall for containing two battalions of men in order of battle. The breadth of the river was about 300 yards, and on the height of the Sarea the British guns could be planted so as to command the whole enclosure round the Seminary. To all appearance no watch was kept by the French in that quarter, as they apparently relied on the impossibility of an attempt being made to cross the river there. At that spot, however, Sir Arthur conceived it practicable to effect a passage; at the same time that a detachment of troops under General Murray was sent a few miles

* Gurwood, iv., p. 298.

up the river to Avintas, to seek a passage there, where it was soon ascertained that some boats could be found. Sir Arthur also caused eighteen or twenty guns to be planted on the height of Sarea, commanding the Seminary.

A skiff, manned by a few brave men, crossed to the Oporto side, and brought back three or four large barges without attracting the notice of the French. This operation was favored by the circumstance that the river makes a rapid bend round the point on which the convent is placed, and the town lies below this point, while the crossing was effected above it. And Soult's personal position, as it happened, was below the town.

The first of the barges, containing an officer and twenty-five of the Buffs, then crossed to the Seminary, where the men disembarked, and where instantly, so to say, in the midst of the French army, but still without any alarm being taken. A second and a third barge followed, filled with troops, the last conveying General Paget. But no sooner had they gained their position than Soult commenced a furious attack upon them with an overwhelming force of cavalry and infantry, supported by artillery. To sustain them, General Hill crossed over with the 48th and 66th regiments, and other troops, and as General Paget was soon disabled by a wound, the command of this most important and trying post devolved, at the most critical moment, upon General Hill. So violent was the struggle, that Sir Arthur was with difficulty prevented from throwing himself across the river into the midst of it. But his confidence in General Hill was such that he restrained himself from taking this step; and well did Hill justify the confidence of his leader. The French made repeated and desperate attacks, which, however, were confined, by the sweep of the British guns on the height of Sarea, to the side of the iron gate. They were successfully resisted by Hill, until some of the citizens of Oporto, having pushed across with large boats, brought over the troops under General Sherbrooke's command in large bodies, a little below the point of conflict; and Murray's troops also were seen descending the river on the Oporto side. Then the rout of the French forces became general and complete, and they suffered severely, both on that day and in their subsequent retreat from Portugal.

In less than three months afterwards, the battle of Talavera followed, in which Hill had an important share. The French were commanded by Marshals Victor and Jourdan, and King Joseph. The Spaniards were commanded by Cuesta, campaigning in his coach and six. And it is well known that on the two days' fighting, of the 27th and 28th July, 1809, the last of which was so bloody, the Spaniards were scarcely so much as noticed by the French, whose whole efforts were directed against the British alone; and the Spaniards, on their part, did as little to attract the notice of the French as was possible.

It is not a little remarkable that both Wellington and Hill made the narrowest escape from being taken prisoners on the 27th. Sir Arthur was then at Casa de Salinas, to reach which place the French had to ford the river Alberche, and to march some distance through woods. But out of these woods, Mr. Sidney states, "they emerged so suddenly that they had nearly made him prisoner at the instant of surprise. Providentially this disaster was not permitted to fall on our army and upon Europe."

The still more dangerous adventure of Hill was stated by himself as follows, in compliance with a request made by a friend some years after the war was over:—

"I recollect on the 27th of July I got some dinner in my quarters in the town of Talavera about four o'clock. Immediately after I rode out, accompanied by Major Fordyce, towards the Alberche, in which direction we heard some firing. I returned to the bivouac of my division, I suppose about sunset, when I found it had moved to take up a position. I instantly followed it, and found it deploying in line, and was shown by somebody where the right was to rest. I pointed out the hill on the line of direction we were to take up. I found, however, I had not sufficient troops to occupy the ground without leaving considerable intervals between the regiments. During this operation I recollect perfectly well that I was with the 48th Regiment, in conversation with Colonel Donellan, when, it being nearly dark, I observed some men on the hill-top fire a few shots amongst us. Not having an idea that the enemy was so near, I said at the moment, *I was sure it was the Old Buffs, as usual, making some blunder.* I desired Donellan to get into line, and I would ride up the hill and stop their firing. On reaching the hill-top, I found the mistake I had made. I immediately turned round to ride off, when they fired and killed poor Fordyce, and shot my mare through the body. She did not fall, but carried me to the 29th Regiment, which corps, by my orders, instantly charged the French, and drove them from the hill. I do not know what numbers the enemy had, but I think they were not

strong—perhaps some of their light troops."—Pp. 111, 112.

It was an eventful day for Europe which so nearly compromised the safety of both Wellington and Hill.

For the battle of Talavera itself, the histories of the war may best be consulted.—But with respect to General Hill's very important share in the honors and dangers of he contest, his own simple and affectionate letters to his family are highly interesting. They naturally relate chiefly to the subjects which were of engrossing interest to his family; but nothing could be more modest and unassuming than the manner in which he refers to himself on an occasion on which, by the confession of all, he displayed the greatest military qualities.

On 30th July he wrote from Talavera:—

Talavera, July 30, 1809.

"My dear Sister,

"God has protected Clement (his brother) and myself in two of the severest battles I ever witnessed, which took place on the 27th and 28th. For the particulars I must refer you to the public despatches, but cannot help mentioning a few circumstances which will show you the providential escapes we have had.—About a week ago I told you that the French had retired from Talavera, on our approach towards them. It now appears they did this, not with the intention of going off altogether, but for the purpose of meeting their reinforcements, which being done by the junction of Sebastiani's force of about 12,000, and King Joseph, from Madrid, with 6000, they turned back with near 50,000, with a determination to bring the whole of it against the British army, not half that number in the field. Early on the 27th we heard of the returning of the French, and as the day advanced they approached nearer. By four in the evening their whole force was in sight, and continued moving forward, driving in our out-posts, till they came within reach of shot from our lines, when they halted; and as night was coming on, we did not expect any serious attack till the next morning. It was, however, scarcely dusk when there was a heavy fire of musketry on my post, and a severe struggle on the part of the enemy to carry it, in which they did not succeed, and in about half an hour gave up the contest. On this occasion poor Fordyce was killed, my horse was shot, and I myself had a fortunate escape from the hands of a French soldier who had got hold of my right arm, and would have secured me if my horse had not at the moment sprung forward. The Frenchman fired at me, but did not touch me. Clement and Captain Currie were in the midst of the whole, but fortunately escaped. Nothing very particular occurred during the night: we continued in our position, and the enemy was near us. My post was on the left, General Sherbrooke in the centre, and Gen. Campbell to his right, and all the Spaniards to Gen. Campbell's right. In the morning, when day broke, we observed the whole French army drawn up in order of battle; the greater part of their force immediately opposite my post, which was evidently the point of attack, and which, if they could have gained, would have given them the day. Sir Arthur Wellesley came to it, and in about half an hour after the sun was up, an immense column, since known to consist of two divisions of 7000 each, under Marshal Victor in person, moved on and attacked us. The fire was tremendous on both sides, but the French could not force us. My horse was wounded early in the action. I got another from an officer. Shortly before the enemy gave up the conflict, I was struck by a musket ball near my left ear and the back of my head. The blow was so violent that I was obliged to leave the field. I continued unwell the whole of the next day, and the next; I am, however, thank God, much better to-day. My hat saved my life; it has suffered as much as my helmet did on the 13th of March. Clement is safe; his horse was killed, and he had three musket-balls in him on the 28th. Currie is also safe, but had his horse killed under him. During the attack on me the enemy did not allow the remainder of the line to be quiet, for, with their numerous artillery, they kept up a constant and destructive fire on it, not regarding the Spaniards at all. In about four or five hours the enemy's fire slackened for a short time; they, however, afterwards began as serious an attack upon General Campbell as they did upon me, and, meeting with the same reception from him and the whole as they did in the morning, were fairly beat, and in the evening after dark went off. The loss on both sides is very great. Indeed, ours probably 4000, the enemy's 7000. King Joseph was in the field, though not in the fire. When it is considered that the French force was double ours, and solely employed against the British, we may count the battle of Talavera amongst the most glorious that ever took place. You must excuse this hasty account—indeed I must again refer you to the official details.—The French are said to be still retreating. Kind remembrance to all our dear friends at Hawkstone, who, I am sure, will be sensible of and thankful for the providential escapes we have had."—Pp. 108-110.

The letters of General Hill to the members of his own family, which are published in this work, give us a very pleasing view of his personal character. And it is not a little refreshing, amid the scenes of so sanguinary a contest, to see one of those who had done the greatest service to his country, and been in the very thickest of the fray, cherishing through it all the same constant attachment to his family and his home,

retaining the same simple modesty of mind as ever, and never forgetful of the gratitude due to Him who had shielded his head in the day of battle.

The British head-quarters were soon afterwards at Badajoz, but Hill, now promoted to the rank of lieutenant-general, was stationed about twenty miles off, with his troops, at Montijo. Here he, and one of his brothers who was with him, enjoyed the pleasures of the chase—hunting the fox, the deer, the wolf, and the wild boar—and preferring country scenes and exercise to all the attractions of "the great display of beauty and fashion in Badajoz." And Hill, having observed that almost all the wool from the district was sent to England, made a purchase of a few of the sheep, to be kept till an opportunity should occur of sending them home, to improve the breed in Shropshire.

When making preparations for the celebrated defence of Lisbon at the lines of Torres Vedras, Sir Arthur Wellesly, now Viscount Wellington, divided his army into two principal corps, the first of which he had under his own immediate command, and the second he offered to General Hill. In a letter to Hill, dated December 18, 1809, Lord Wellington stated as to this second corps—"I will not make any arrangement, either as to the troops that are to comprise it, or as to the officer who is to command it, without offering the command of it to you." A higher proof than this of the talents and services of General Hill it was impossible to give; and having accepted the important trust thus tendered to him, most amply did he justify the confidence reposed in him by his great leader. It is not a little interesting to observe, in the correspondence which ensued between these two able soldiers, how often General Hill, in the exercise of such discretionary powers as were intrusted to him, was found to have anticipated the instructions of Wellington, by making just those dispositions which Wellington's instructions, on their subsequent arrival, were found to point out.

General Hill had an honorable share in the battle of Busaco, where the French, commanded by Massena and Ney, were worsted in September 1810. The scene at nightfall after the battle, as beheld by the British from the mountain of Busaco, at the foot of which the French encamped, is well described by Mr. Sidney:—

"The night which succeeded this memorable day, afforded to the victorious occupants of the mountain, scenes of indescribable grandeur. The whole country beneath them glowed with countless fires, showing thousands of shadowy forms of men and horses, mingled with piles of arms glittering amidst the flames. These gradually subsided into glowing patches of red embers gemming the black bosom of the earth, and all seemed to threaten another mighty conflict at the dawn of day. The men under Hill were kept in their full accoutrements, and each with his musket by his side, front and rear ranks, head to head, lay upon the mountain, awaiting the morn, and expecting that an assailable gorge near at hand would be the point of attack."—Pp. 143, 144.

Next day, however, the French moved off, without renewing the fight.

Then followed the occupation of the fortified lines at Torres Vedras, extending from the right bank of the Tagus, near Alhandra, to the sea, over a space of about twenty-five miles, and covering Lisbon from the advance of the French under Massena. This is not the place to dwell on the details of these celebrated lines, and the baffling of the French Marshal, who was at last compelled to retreat with that large force which Napoleon had given to "the spoiled child of fortune," with a peremptory mandate to seize on Lisbon, and drive the British into the sea. But there is a letter of General Hill, written to his sister in November 1810, from his post at Alhandra, which mentions some curious particulars respecting the extra-professional intercourse of the two great armies, which had been for some time so near each other. Something like personal acquaintance took place between the soldiers in the hostile ranks, and even a species of friendship sprung up, upon a soil where, most of all, it would have seemed to be exotic. It is impossible to read the account of this, without having the mind most powerfully impelled to the reflection, how strangely human beings have been forced from the relations which their Maker designed them to hold towards each other, when they are mustered and armed on the battle-field, as enemy and enemy, bent on mutual destruction.

"My dear Sister," he writes, "on this day week I wrote to Sir John, (his father,) since which time nothing of consequence has occurred. The two armies remain as they were, the British in the position I mentioned in my last, with the right on the Tagus, and the left on the sea near Torres Vedras, a distance, probably, of about 25 miles. The French advanced regiments are close to us; that is, some of them not more than a mile and a half from the place where I am now writing, with the sentries within musket-shot of each other. In this situa-

tion we have been for the last month, and I dare say it will appear rather extraordinary when I tell you that we are perfectly good neighbors, and never think of molesting each other. On the contrary, I have been obliged to put a stop to the intimacy which was going on. It was by no means uncommon to see the soldiers of each army getting grapes out of the same vineyard, water from the same well, and asking each other to drink wine. Indeed, I know of some instances, though not quite correct, of our officers sending to Lisbon for boots and shirts for some of their *friends* at outposts." —Pp. 150, 151.

Being attacked with fever, General Hill was reluctantly obliged to go to England in the end of 1810. A few months at home recruited his health, and he immediately returned to the army, which he rejoined in May 1811. His return was hailed by the soldiers with eager rejoicing; and the alacrity with which he again resumed his duties was destined, ere long, to receive its reward.

The French armies, in various strength, occupied the several provinces of Spain; and at the time when Marmont, having Lord Wellington in front, was advancing to relieve Ciudad Rodrigo, he requested General Girard, a brave French officer, to advance from the south towards the army under General Hill, which was posted south of the Tagus, and to manœuvre upon it, so as to prevent Hill from giving aid to Wellington. This occurred in September 1811. Ciudad Rodrigo was relieved, and Girard, who had made a certain approach towards Hill, withdrew southwards again to Zafra; but afterwards, about the middle of October, made an excursion northwards, crossing the Guadiana, and spoiling the northern district of Spanish Estremadura. Hill was possessed of forces of superior strength to his, but was under considerable restriction respecting the sphere of operating with them, as the position which he occupied was too important to be exposed to any unnecessary hazard. Believing, nevertheless, from the information which he had received of the enemy's movements, that he could not only compel his retreat southward across the Guadiana, but strike a blow at the same time, Hill proposed to operate against him in conjunction with the troops under Castanos, and with that view put himself at the head of that part of his troops which was destined for this service.

What followed will best be told in the words of Mr. Sidney—

"While on his march, General Hill discovered that Girard was at Arroyo de Molinos, and not aware of his movements, which at once induced him to decide on overtaking and surprising the whole force of the French, or at all events compelling them to an action. The weather was wretched in the extreme; but the soldiers did not fail, in a long forced march instantly undertaken, in the most perfect quietude, that no symptom of their approach might alarm the enemy. By the evening of the 27th they were at Alcuescar, within four miles of their unconscious foes. Every conceivable precaution was resorted to. The light companies were thrown into the villages to prevent the natives from alarming the enemy; and the cavalry, artillery, and infantry were disposed of in the neighboring fields, with the strictest orders not to cheer the cold and gloomy night with a single fire, the flickering of which might give indication that they were near. The wind blew furiously; the rain fell in torrents; and the patient soldiery had no protection from the storm, except the drenched coverings of their tents, which the gale had thrown down; but their patience and confidence in the leader they loved deserted them not. They were warmed by the flush of expectation that the morning would recompense them for all their toils; and the first streaks of dawn had not appeared in the horizon, when the various columns fell in, without a single note of a bugle or the beat even of one solitary drum. The ground was admirably chosen with a view to concealment: they filed quietly through the village, and having crossed an intervening mountain, found themselves, just as the day began to break, within half a mile of Arroyo, where Girard was yet in security, ignorant of their presence and his own danger. At this instant, a violent hail-storm, pouring on the rear of the allies, caused the faces of the French picquets to be turned from them; but just as they were ready to make the decisive movement, the clouds cleared away, the sky became serene, and the hostile corps was preparing for their march, in expectation of a propitious day. The decisive moment had arrived. General Hill was himself inspired, as was every brave man he commanded, with the enthusiasm of the scene. The usual calmness of his demeanor, rendered even more than commonly striking by the precautions he had taken for silence, became suddenly converted into an animation that cheered and almost amused every witness of his ardor. It seemed kindled in an instant. He drew his sword—gave a loud hurrah—spurred his horse—and led the charge on the astonished ranks of the French, then forming without a thought that he was so near at hand. The first brigade, headed thus vigorously by himself, moved at once on the village of Arroyo, and the Highlanders catching up the humor of the hour, were heard playing on their bagpipes, '*Heigh, Johnny Cope, are you waking yet?*' The second brigade, under General Howard, moved quietly round to the other side of the place, to intercept the troops

which the first should drive out. In the centre came the cavalry, ready to act in whatever way might be deemed expedient. Presently the 71st and 92d Regiments dashed into Arroyo, and came upon the French just as they were filing out, with the exception of one brigade, which had marched for Medellin before daylight. This charge first announced to them the snare into which they had fallen; and with only a feeble effort on the part of their cavalry, they were driven before the bayonets of the British. The French infantry, nevertheless, having emerged from the town, tried to form into two squares, with cavalry on their left; but the 71st lining the garden-walls of the town, poured into them an awful fire, which was soon succeeded by that of artillery. They fled in utter confusion, and the capture of prisoners, cannon, and baggage, rapidly followed. Then came the memorable pursuit of that extraordinary day. Just behind the routed forces of Girard rose the rocky and steep Sierra de Montanches, up which they clambered in a state of utter confusion, throwing away their arms, ammunition, and knapsacks, and yielding their persons as prisoners to their pursuers at every step. In the excitement of such a chase, the British, the Portuguese, and the Spaniards, seemed all to forget that they had been without rest, and soaked with rain and mist all the night before. They laughed, shouted, jumped in their heavy accoutrements, or caught the scrambling horses of the fugitives, who could not ride them over the mountain, and came down mounted in triumph, till fatigue caused some to desist, and the rest being too much scattered, were judiciously stopped on the summit of the Sierra by General Howard. Nearly fifteen hundred prisoners were taken, and some of them of high rank. Lieutenant Blakeney, of the 28th, leaped over a wall, and seized the Prince D'Aremberg in the midst of a group of officers. General Brun was also taken, with a colonel of caval.y, an aide-de-camp of Girard, two lieutenant-colonels, a commissaire de guerre, and no less than thirty captains and inferior officers. Girard himself, with a handful of men, escaped by the bridge of Medellin, declaring he would rather die than surrender. It was altogether a most brilliant achievement, and is thus eloquently adverted to by Major Sherer in his Recollections of the day. 'One thing in our success at Arroyo de Molinos gratified our division highly; it was a triumph for our General—a triumph *all his own*. He gained great credit for this well-conducted enterprise; and he gained what, to one of his mild, kind, and humane character, was still more valuable, a solid and bloodless victory; for it is certainly the truest maxim in war, "that conquest is twice achieved, where the achiever brings home full numbers."'"—Pp. 167-170.

The French force when attacked, consisted of about 3000 infantry, and 1600 cavalry and artillery. Prince D'Aremberg was a connexion of the imperial family, and a prisoner, to whose capture Lord Wellington attached much importance. About 500 of the French were killed. Those who escaped were dispersed, and had thrown away their arms, so that the whole corps was literally annihilated. Girard, who was wounded in making his escape, was put under arrest by Soult; but Napoleon, knowing his thorough bravery, forgave his disaster.

The success of Hill gave the most cordial pleasure not only to his brother officers, but to the whole army; and Lord Wellington, in suggesting to the Government the propriety of bestowing a mark of favor on General Hill, could add with truth, that "there was no officer to whom an act of grace and favor would be received by the army with more satisfaction."

The Order of the Bath was now conferred on General Hill, who was invested with the insignia at Elvas by Lord Wellington. This distinction brought along with it some rather amusing discussions relative to the herald's office. He writes to his brother from Guerena,—

"For my part, I do not care much what the supporters are, but, I must confess, I do not much like fancy figures, such as I have seen to some arms, supported by a *jolly tar*, a *grenadier*, a *light infantry man*, or a *heavy* or *light dragoon;* such, I think, are bad. It strikes me that animals are the handsomest. Some have lions: you and I, probably, would have no objection to a *grey-hound*, while there are others who would prefer the *fox-hound:* but, upon the whole, I should be glad to leave the choice to the ladies; they have more taste than we have."—Pp. 186, 187.

It would appear that his wish, respecting supporters, was attended to, as he escaped both "jolly tars," and "heavy or light dragoons." The lion and the horse were preferred by the heralds to that honor.

The month of May 1812 was signalized by General Hill, now Sir Rowland, performing one of the most daring and successful exploits of the Peninsular war. It is commonly called the Surprise of Amaraz. There are few instances, even in the history of those eventful and romantic campaigns, in which more occasion was given for developing those resources of mental energy, the possession of which enables a man to meet unforeseen emergencies with promptness, and to surmount obstacles and dangers by mingled skill and courage.

Masses of the French troops occupied various districts of Spain, both to the north and to the south of the river Tagus. It was an equal object with the French, to preserve for themselves a good communication for the passage of an army across the river, and with the British to destroy it. Soult's pontoon equipage had been captured in April preceding, when Badajoz fell. The left, or south bank of the Tagus, all the way from Toledo down to the frontiers of Portugal, was either lined with mountains so rugged as to be impracticable for the passage of an army; or, at least, consisted of ground of so difficult a character, and intersected by roads so bad, as to be practically unavailable, with the exception of the road and bridge, which crossed the river at the town of Almaraz. Seeing the importance of preserving this passage, Marmont had laid down a boat-bridge at Almaraz, which was defended on the north bank by a fort, called after himself, Fort-Ragusa, and on the south bank by a fortified head of masonry, or tête-de-pont, flanked by a fort or redoubt, called Fort-Napoleon. In Fort-Ragusa there was a magazine containing many stores and provisions. The fort was of great strength, having a stone tower, loopholed for musketry, twenty-five feet high within, and flanked without by a field-work near the bridge. On the left or south bank, Fort-Napoleon was placed on a height a little in advance of the bridge; and it was also of great strength, containing within it a second interior defence, with a loopholed stone tower, a ditch, draw-bridge, and palisades. These forts and the tête-de-pont were armed with eighteen guns, and garrisoned by more than 1000 men, under the command of a brave officer.

But even these were not all the defences which were opposed to an assault from the south, from which quarter Hill's troops were to advance; because the royal road which, about five miles after leaving the river, crossed the rugged ridge of the Mirabete, was there defended by a line of works which the French had thrown across the pass. These works consisted of a large fortified house, connected by smaller posts with the old watch-tower of Mirabete, on which eight guns were mounted, and which was surrounded by a rampart twelve feet high. It was only along the road defended by these works, that artillery could be carried forward to the attack of Fort-Napoleon.

The position of Almaraz was distant four days' march from Merida, the nearest place on which the British force sent against Almaraz could fall back for support. And in order to make it possible to attempt the destruction of the bridge and forts, and bring back the British force in safety, it was necessary to make various feigned movements of troops, so as to throw the French off their guard respecting the true object of attack, and to carry on every preparation for the expedition in the utmost secrecy to the last moment. It would otherwise have been in the power of the French to have so disposed of part of their nearest troops as to not only have frustrated the attempt upon the bridge, but greatly endangered the retreat of the British force to Merida.

The destruction of the bridge and forts had for some time been an object of desire to Wellington, and when he thought a favorable conjuncture had arrived, he wrote to Hill, suggesting that the blow might be struck, and that

> "one of your British brigades and two Portuguese brigades, or one-and-a-half British and one strong Portuguese brigade, would do your business as to the French in that neighborhood. * * * Make all your preparations in secret for this expedition. I shall watch from hence the course of the enemy's retreat, and will let you know, if it should appear to me that you have any thing to fear from any of the divisions of the army of Portugal going near Almaraz."—P. 189.

After some unavoidable delays, which increased the hazard of the undertaking, Hill set forward for Almaraz, taking the command of the force in person.

On drawing near the point of attack, a march by night and a surprise was at first intended; but, from the difficulty of the roads, the night passed before the attack could be made, and the intended surprise became impossible. On examining the strength of the tower and works across the Mirabete pass, Hill considered that it would cost too great a waste of life to attempt to force it, and therefore he anxiously explored the localities, in quest of any other pass by which his artillery might be carried forward to the bridge. Upwards of one whole precious day was thus occupied, but the search was fruitless. Other men—and able men too—might then have abandoned the undertaking in despair; but the genius of Hill rose with the crisis, and he took the daring resolution of leaving the artillery, with a part of the troops, behind, and proceeding

with infantry alone to storm works which were defended by eighteen pieces of artillery and a strong garrison. Such a decision fully evinces the great importance which was attached to success in the object of the enterprise, as well as the consciousness that every hour of time which was passing overhead, while so far from the main body of the British army, was fraught with danger. The event proved that Hill had not over-rated the capabilities of the troops, led by himself.

On the evening of the 18th May, he marched with Major-General Howard's brigade, composed of the 50th, 71st, and 92d regiments, "by a goat's path" leading to the bridge. The party carried scaling ladders, which they were obliged to cut in halves, so as to thread the short narrow turns in the precipitous descent, even at the risk of thereby rendering them too short for afterwards scaling the fort. The march did not exceed five or six miles, yet the difficulties of the road were such, that it was not completed, and the column for attack formed near the fort, before daylight. Fortunately the nature of the ground was such, that they were enabled to get close on Fort-Napoleon before being discovered. And at this time a false attack, which was made on the Mirabete tower by the troops which had been left near it, kept the French in Fort-Napoleon under the belief that the British were resolved to reduce that tower, and bring up their artillery along the royal road, before making any attempt on the fortifications at the bridge. But while their attention was eagerly strained towards the Mirabete tower, where the sound of firing was heard, and smoke was visible, of a sudden the war-cry of the storming party broke upon their ear, and the scaling ladders were almost in the same instant planted against the fort, on three of its sides.

The French soldiers were brave and bravely commanded. They immediately turned both musketry and artillery on their assailants, and for a short time caused havoc among them. But this was soon over. The scaling ladders, though too short to reach the top of the wall, were found long enough to reach a beam in it, on which the soldiers could not only gain a footing for themselves, but pull up and plant their short ladders anew, and so surmount the wall. And with an irresistible ardor, pouring into Fort-Napoleon, and there making prisoner the French commander who was wounded, the British troops drove their opponents at the point of the bayonet through the several intrenchments of the fort, and pell-mell entered the tête-de-pont with them. The French on the north bank of the Tagus cut the bridge, or, according to other accounts, the bridge was broken by some cannon shot, and many of the French soldiers, driven before the British assault, perished in the river.

As soon as Fort-Napoleon was taken, its guns were turned by the British on Fort-Ragusa, and although the river Tagus now intervened between the French in that Fort and their assailants, yet such was the effect of the sudden surprise and attack that a panic seized the French on the north side of the river, and they evacuated Fort-Ragusa. Two grenadiers, whose names deserve to be recorded, James Gould and Walter Somerville, then plunged into the river, followed by some of their comrades, and swam across. They brought back boats, by means of which the river was passed, and the destruction of Fort-Ragusa equally with Fort-Napoleon, was immediately completed. The whole apparatus of the bridge, and the workshops, magazines, and everything which could be available to the enemy, were also demolished. Gould and Somerville, besides the applauses of their comrades, received each a purse of gold from their commander.

So very essential were Hill's promptness and celerity to his success, that a French battalion, as was afterwards learned, had actually been ordered forward to Almaraz, and was already at Naval Moral on the 18th of May. It might have entered Fort-Ragusa early on the morning of the 19th; but instead of marching before day-break, it did not move till eleven o'clock, and meeting the fugitives from Fort-Ragusa on the road, it too caught the panic and returned. Hill brought back his troops to the main body of the army in safety. The loss which had been sustained in the escalade was small, when the difficulties of the attack are considered. And thus was brought to a brilliant issue one of the boldest enterprises even of that daring time. When General Hill was afterwards, at the close of the Peninsular War, elevated to the peerage, it was not without cause that it was by the style of Baron Hill of Almaraz and of Hawkstone.

Our space will not permit us to trace with any minuteness the subsequent scenes of Sir Rowland Hill's important services in the Peninsula. But an incident oc-

curred, soon after the surprise of Almaraz, which, although entirely wanting its brilliancy and éclat, is perhaps as deserving of attention by those who would justly appreciate Sir Rowland's character. He found himself in presence of a French force, not superior to his own, and commanded by Drouet. On this occasion it is well stated, by a competent judge, that "Hill, who had shown himself so daring at Arroyo Molino and Almaraz, now, with an uncommon mastery of ambition, refrained from an action which promised him unbounded fame, simply because he was uncertain whether the state of Lord Wellington's operations in Castile, then in full progress, would warrant one. His recent exploits had been so splendid, that a great battle gained at this time would, with the assistance of envious malice, have placed his reputation on a level with Wellington's. Yet he was habituated to command, and his adversary's talents were moderate; his forbearance must therefore be taken as a proof of the purest patriotism."*

It was characteristic of our country, and one of the pleasing results of its free institutions, that in this year Sir Rowland Hill was elected member of Parliament for Shrewsbury. This news gave him high satisfaction, and reached him, at a period of great anxiety to Lord Wellington and himself, when they were respectively falling back from Burgos and Madrid, upon Salamanca, closely followed, in their retreat, by a greatly superior force. It was after this movement was over, that Lord Wellington congratulated himself, in terms which have become celebrated, on having "got clear in a handsome manner of the worst scrape he ever was in."

The great battle of Vittoria followed, in the perils and honors of which Hill's troops, composing the right of the British army, had a full share.

In the subsequent hard fighting, by which the French were at length driven across the Pyrenees, and within the confines of their own country, Sir Rowland had a conspicuous part; and Mr. Sidney observes, that as Sir Rowland, when in Egypt, at the head of the 90th regiment, gave the French the first check they had there received, so it was the force under his command which first forced them over the frontiers of Spain, and drove them back within their own territory.

Of the battles which were joined near the frontiers of France and Spain, that of the Nive, or St. Pierre, has been already alluded to. In most of the other severe battles of that period, such as those of the Nivelle, Orthez, Aire, and Toulouse, Sir Rowland rendered important service to his country. But our limits will not admit of our dwelling upon these.

On the abdication of Napoleon, Sir Rowland returned to England, and received from his countrymen of all ranks the grateful welcome which he so well merited. He was one of the five general officers who were then elevated to the peerage. He was presented with a sword by the city of London, and also with the freedom of the city. On his way to his family at Hawkstone, he was presented with a sword by the town of Birmingham. On reaching Shrewsbury, the town and county united in his enthusiastic reception, and at the dinner in the Guildhall his venerable father had the pride of sharing with Lord Hill in the honors of the day.

On one of these festive occasions, an incident occurred, characteristic of the amiable and affectionate dispositions of Lord Hill. He accompanied his friend Lord Combermere on his entry into Chester, where he himself received a greeting all the more cordial from his having spent some of his earlier years at a Chester school. As he passed along the streets of the city in a triumphal procession, it was observed that his eye singled out among the applauding throng, one on whom he bestowed the kindest recognition. It was Mrs. Winfield, the wife of his former tutor, whom he thus distinguished. He had never forgotten her kindness to him when a boy, and both at this time and afterwards he took care to evince the enduring nature of his regard.

An interesting account is given by Mr. Sidney, derived from Lord Hill himself, of the manner in which he was despatched to Belgium after Napoleon's escape from Elba. He had taken his sister, Miss Emma Hill, to visit London in the spring of 1815, little expecting what was there to await him. We quote what follows from his own account, given to Mr. Sidney in 1842:—

"'I will tell you something that few persons know. When Bonaparte came back from Elba, I was in London. One day I was sent for suddenly to the Cabinet. They told

* Napier's *Peninsular War*, vol. v., p. 63.

me there was a fear of an action being risked on the frontier of the Netherlands that might prove disastrous. 'We think,' they said, 'your influence would operate to prevent it—will you go?' I answered, 'Yes.' 'When? To-night?' 'No; not to-night; to-morrow morning.' I went home, got ready, and set off; and was able to keep all right till the arrival of the Duke of Wellington. This, I believe, is not generally known.' When this conversation was told to his sister, she said she remembered that the evening before his sudden departure, he was to have gone to the opera. At dinner he quietly remarked, 'I cannot go with you this evening; I am off to-morrow morning;' but the cause of his rapid movement was not mentioned. He went, leaving his attached aid-de-camp, Major Egerton, to arrange his affairs, and follow him as soon as possible."—P. 297.

At the battle of Waterloo Lord Hill distinguished himself greatly, and added much to his previous claims on the gratitude of his country. He was there exposed to the greatest personal danger. His horse was shot under him, and fell wounded in five places. He himself was rolled over and severely bruised, and for half an hour, in the melée, it was feared by his troops that he had been killed. But he rejoined them to their great delight, and was at their head to the close of the day.

"When the tremendous day was over," writes his biographer, "Lord Hill and his staff again re-occupied the little cottage they left in the morning. His two gallant brothers, Sir Robert Hill and Colonel Clement Hill, had been removed wounded to Brussels; the party was, nevertheless, nine in number. A soup made by Lord Hill's servant from two fowls was all their refreshment after hours of desperate fighting without a morsel of food. Lord Hill himself was bruised and full of pain. All night long, the groans and shrieks of sufferers were the chief sounds that met their ears. It was to them all a night of the greatest misery. The men whom the nations of Europe were about to welcome with acclamations, and to entertain in palaces, could only exchange sigh for sigh with each other in a wretched cottage. Such is war, even to the winners. May a gracious God soon make it to cease in all the earth!"—Pp. 307, 308.

It has been a subject of debate, at what precise hour of the day the battle of Waterloo began. Apparently Lord Hill, when asked that question, has set the matter at rest by the following answer:—"I took two watches into action with me. On consulting my stop watch after the battle was over, I found that the first gun was fired at ten minutes before twelve."

It is scarcely necessary to say that the friendship which had sprung up, at an early period, between Wellington and Hill, had been cemented during the progress of those campaigns which shed so much lustre over both of these great brothers-in-arms. But an incident occurred after the close of the war, which not only shows the strength of that friendship, but is so honorable to both, that it deserves to be specially recorded. By unforeseen circumstances the family of Lord Hill was exposed to heavy pecuniary losses, which threatened to occasion great inconvenience. Lord Hill was not one of those soldiers who had gathered booty during his campaigns. Though instances had occurred, as after the battle of Vittoria, when a profusion of rich spoil lay exposed for seizure, the whole amount of booty which he ever appropriated was one plain china drinking cup. When Lord Wellington was informed of the pecuniary losses just mentioned, he immediately and cordially offered, in terms the most delicate, to place his own funds at the disposal of his friend. Fortunately Lord Hill did not, in the event, require to avail himself of this offer; but the frank kindness with which it was made, did not the less credit to the generosity of the Duke.

We have not space to dwell longer on the latter portion of Lord Hill's career; nor is it needful that we should. The command in India, the Lieutenant-generalship of the Ordnance, and afterwards the Master-generalship, were severally offered to his lordship and declined by him. When the Duke of Wellington resigned the office of Commander-in-Chief in 1828, Lord Hill was appointed to succeed him at the Horse Guards, and he held the appointment until his failing health obliged him to resign it in August 1842, on which occasion he was raised to the rank of a Viscount. It is gratifying also to learn that, at his request, as he had no issue of his own, both his peerage and his pension were settled on the male issue of his elder brother Colonel Hill. There have been other cases in which a similar request was ungraciously refused. We are glad to record the more favorable reception given to Lord Hill's application, and we trust that a title so honorably won may long remain in the British peerage.

But though passing thus hastily over this less stirring portion of the public life of Lord Hill, we cannot refrain from extracting an interesting passage from Mr. Sidney's work, respecting his private life and

habits, on finally returning home from France.

"On the termination of his duties at Cambray, Lord Hill came to England. At Hawkstone there had gathered round his venerable father such a family circle as has seldom assembled at the board of any parent. Lord Hill took his place at table, daily, with six brothers and four sisters, besides the widow of his lamented eldest brother, whose children he regarded with paternal solicitude. There never lived a more unaffected human being than Sir John Hill. When he heard that his sons had survived Waterloo, he exclaimed, 'God bless the lads!' and their presence in his own house seemed to add fresh vigor to his old age.

"In the ease and enjoyments of home, Lord Hill's chief anxiety seemed to be to add to the cheerfulness and comfort of all about him. His farm and his garden occupied some portion of his time, and he was fond of hunting, shooting, and fishing in a quiet way. The poor were the objects of his peculiar kindness. A soldier's wife on the estate had requested him to make some application regarding her husband, which was successful. He received the answer in his favor just as he was going out with the hounds. After riding a little way he disappeared, and nobody knew where he was gone. At length it was discovered that he had quietly withdrawn from the field, to carry in person the acceptable tidings to the poor woman who was anxiously expecting them. The farmers used to be delighted to see him, when he rested in their houses on his shooting excursions. He would play with their children in the most winning manner, taking them on his knee, and amusing them in every way he could devise. The only thing which seemed to embarrass him was the extreme modesty of his nature; so that actually when about to confer the greatest favor, he would appear more confused than other persons would have been if they had solicited it. So simple were his manners, that it was difficult for an ordinary observer to imagine him possessed of any of those qualities by which he had gained his high reputation."—Pp. 324-326.

Sir John Hill, the father of Lord Hill, died in 1824. His uncle, the well-known Rev. Rowland Hill, to whom he seems to have been much attached, died in 1833, in the 89th year of his age. Lord Hill was not destined to reach these years, but nevertheless had attained the advanced age of 70, when he died on the 10th December, 1842. In his last illness he showed all the patient fortitude which was suitable to his previous character, and he was sustained by the hope and comfort which Christian faith can alone bestow. After his death there was found among his private papers a record of his reflections, partly upon the duties which he owed to his Maker, partly upon his duties to his fellow-men, which afforded the strongest evidence of his trusting for strength to God alone, and habitually leaning on Him for support. Nor could the discovery of this private document cause any feeling of surprise to those who had observed the sentiment of reverential piety with which his heart was imbued.

Mr. Sidney quotes, with just commendation, a letter respecting Lord Hill, recently written by an officer of his division in Spain, who thus characterizes his former General:—

"The great foundation of all his popularity with the troops was his sterling personal worth, and his heroic spirit; but his popularity was increased and strengthened as soon as he was seen. He was the very picture of an English country gentleman. To those soldiers who came from the rural districts of Old England, *he represented home*—his fresh complexion, placid face, kind eye, kind voice, the total absence of all parade or noise in his habits, delighted them. The displeasure of Sir Rowland Hill was worse to them than the loudest anger of other generals; and when they saw anxiety in his face that all should be right, they doubly wished it themselves; and when they saw his countenance bright with the expression that all was right, why, they were glad for him as well as for themselves. . . . Also his kind attention to all the wants and comforts of his men, his visits to the sick in the hospital, his vigilant protection of the poor country people, his just severity to marauders, his generous and humane treatment of such prisoners and wounded as at times fell into his hands—all consistent actings of a virtuous and noble spirit—made for him a place in the hearts of the soldiery; and wherever the few survivors of that army may now be scattered, in their hearts assuredly his name and image are dearly cherished still."—Pp. 228, 229.

To these extracts we would add the observation of Mr. Sidney himself, in the truth of which we entirely concur, that—

"The secret of Lord Hill's constant advance at every step and on every occasion was this—that to the most endearing goodness of disposition there was added a fixed, simple determination to do his duty according to the ability he possessed, and, above all, the zeal and devotedness to his country of a patriotic and courageous heart."—P. 30.

Such is a brief outline of the life and character of Lord Hill. During his lifetime the inhabitants of his county town of Shrewsbury, reared a column in his honor, which records his feats of arms, and not less his personal virtues. But his proudest

monument will be the recollection, ever cherished by his admiring countrymen, that he not only achieved great deeds, and was distinguished by nearly unchequered success, but that his fortune was not superior to his worth. Requiring less allowance than most other public men for the frailty incident to human nature, it may justly be said of him that he was not only a good but a great man.

Lord Hill was eminently distinguished by that quiet simplicity of character which so often accompanies genuine greatness. He not only rose to the highest rank, but attained the most brilliant renown, without becoming giddy by his elevation. Among all the accounts which have been given of the battles and enterprises in which he had so large a share, there are none in which his own merit is so slightly considered as in the letters written by himself. And yet it is evident from the strain of these letters, as well as from the acuteness and talents of Lord Hill, that this proceeds neither from a defective perception of the praise which was justly due to him, nor yet from that affectation which pretends to veil what it really seeks to display, but from the manly modesty of nature which is satisfied with having done great things, without descending to blazon them.

On the whole, regarding the gentle and generous boyhood of Lord Hill, from the first dawning of his earliest youth at school —tracing onwards his mature ripening into heroic manhood during his military career—observing the unfailing devotion with which he dedicated his whole energies to the faithful discharge of duty—and recollecting that to all this were added the amiable graces of a pure and affectionate heart, —we think his life may well be made the subject of most profitable study and contemplation. And we do not hesitate to say, that the example which he has bequeathed in his military course, will henceforward form a valuable portion of the best inheritance of the youthful soldiers of Britain.

We trust, indeed, with a confidence which grows daily stronger, that war is not destined to be the future arbiter of the fate of nations, to the same extent as it has been in times that are past. But whether this reliance be well or ill-founded, we feel assured that the soldier who best studies and appreciates the life and character of Lord Hill, will never be found in the number of those who undervalue the blessings of peace.

LADY HESTER STANHOPE.

From the Literary Gazette.

Memoirs of Lady Hester Stanhope, as related by Herself in Conversations with her Physician, &c. 3 vols. Colburn.

Notwithstanding all we have read of this extraordinary lady in the publications of Lamartine, Pückler Muskau, and almost every traveller who visited Syria during her long sojourn on Mount Lebanon, we are well pleased to meet with this more ample and complete biography from the hands of one who had such superior opportunities to study her character, and to obtain possession of the information she was so prone to pour forth into listening ears. Much, therefore, as has been anticipated concerning her, and much has appeared within the last ten years in the pages of the *Literary Gazette*, we repeat our satisfaction at reviewing the miscellaneous, gossiping, and entertaining volumes through which it is now our duty to thread our way.

Naturally partial to his subject, the author represents her as having suffered much from the harshness of the English government in regard to withdrawing her pension—an affair which made much noise some years since—and consequently as being impoverished, and exposed to many inconveniences, when she was supposed to be rich and exercising a kind of sovereign authority; and he draws a miserable picture of her domestic establishment, and her own violent temper and imperious conduct. Looking upon the circumstances related, were not our pity somewhat touched by the conviction that her "eccentricities" were the results of sheer insanity, and that never was there so mad a lady, we should say that all the miseries to which she was subjected, or subjected herself, were the just and too light punishment for her utter want of feeling and savage barbarity towards every soul within the scope of her crazy vagaries and remorseless selfishness. She died, as such a person ought to die, neglected and forsaken; for those who have no sympathies for their fellow-creatures deserve neither sympathy nor succor —as they have existed for themselves, let them perish by themselves, and rot by themselves. "Before I conclude (says her physician and biographer), I think it necessary to add a few lines respecting the last months of her existence. Lady Hester Stanhope died, as far as I have been able

to learn, unattended by a single European, and in complete isolation. I was the last European physician or medical man that attended her, and I was most anxious and willing (foreseeing her approaching fate as I did) to continue to remain with her: but it was her determined resolve that I should leave her, and those who have known her cannot deny that opposition to her will was altogether out of the question. There is no doubt that, by prolonging my stay on Mount Lebanon, I might have been of considerable service to her ladyship. She was about to shut herself up alone, without money, without books, without a soul she could confide in; without a single European, male or female, about her; with winter coming on, beneath roofs certainly no longer waterproof, and that might fall in; with war at her doors, and without any means of defence except in her own undaunted courage; with no one but herself to carry on her correspondence; so that every thing conspired to make it an imperative duty to remain with her: yet she would not allow me to do so, and insisted on my departure on an appointed day, declaring it to be her fixed determination to remain immured, as in a tomb, until reparation had been made her for the supposed insult she had received at the hands of the British government. It would have been expected that the niece of Mr. Pitt, and the grand-daughter of the great Lord Chatham, might have laid claim to some indulgence from those whose influence could help or harm her; and that her peculiar situation in a foreign country, among a people unacquainted with European customs and habits (being left as she was to her own energies to meet the difficulties which encompassed her), might have exempted her from any annoyance, if it did not obtain for her any aid. A woman sixty years old, with impaired health, inhabiting a spot removed many miles from any town, amidst a population whom their own chiefs can hardly keep under control, was no fit object, one would think, for molestation under any circumstances; but, when the services of Lady Hester's family are put into the scale, it seems wonderful how the representations of interested money-lenders could have had sufficient weight with those who guided the State to induce them to disturb her solitude and retirement. Will it be believed, that when, in August 1838, I took leave of her, the beam of the ceiling of the saloon in which she ordinarily sat was propped up by two unsightly spars of wood, for fear the ceiling should fall on her head; and that these deal pillars, very nearly in the rough state in which they had been brought from the north in some Swedish vessel, stood in the centre of the room? Her bedroom was still worse; for there the prop was a rough unplaned trunk of a poplar-tree, cut at the foot of the hill on which her own house stood. It may be asked, whether there were no carpenters or masons in that country? There certainly were both; but, where carriage is effected on the backs of camels and mules, and there are no wheeled vehicles whatever, in a sudden emergency (such as the cracking of a beam) resort must be had to the most ready expedient for immediate safety; and with her resources cramped by the threatened stoppage of her pension, her ladyship could not venture on new roofing her rooms—a work of time and expense. The perusal of the narrative which is here submitted to the reader will sufficiently account for Lady Hester's debts; and the most cursory visit to her habitation at Jôon (or Djoun, as the French write it) would have proved to anybody that the money which she had borrowed was never expended on *her own* comforts: —a tradesman's wife in London had ten times as many. Having no other servants but peasants, although trained by herself, she could scarcely be said to have been waited on; and a tolerable idea may be formed of their customary service, when an eye-witness can say that he has seen her maid ladling water out of a cistern with the warming-pan, and a black slave putting the teapot on the table, holding it by the spout, and the spout only. But these were trifles in comparison with the destruction and pilfering common to the negresses and peasant girls; and so little possibility was there of keeping any article of furniture or apparel for its destined purpose, that, after many years of ineffectual trouble, she who was once, in her attire, the ornament of a court, might now be said to be worse clad than a still-room maid in her father's house. Her ladyship slept on a mattress, on planks upheld by tressels, and the carpeting of her bedroom was of felt. She proclaimed herself, with much cheerfulness, a philosopher; and, so far as self-denial went, in regard to personal sumptuousness, her assertion was completely borne out in garb and furniture. How far she deserved that title upon the higher grounds of specula-

tive science and the extraordinary range of her understanding, let those say who have shared with the writer in the profound impression which her conversation always left on the minds of her hearers. Peace be with her remains, and honor to her memory! A surer friend, a more frank and generous enemy, never trod the earth. 'Show me where the poor and needy are,' she would say, 'and let the rich shift for themselves!' As free from hypocrisy as the purest diamond from stain, she pursued her steady way, unaffected by the ridiculous reports that were spread about her by travellers, either malicious or misinformed, and not to be deterred from her noble though somewhat Quixotic enterprises by ridicule or abuse, by threats or opposition."

From this view we have *à priori* proclaimed our entire and hearty dissent. There was nothing except her descent to obtain for Lady H. Stanhope this honor, this affectionate obedience, this devotedness to her comforts, this sacrifice to her happiness. Lip-service and terrified duty were all her behavior to her dependants deserved; and curses, not loud but deep, were what she wrought for all her days and all her nights, only redeemed by the favor of some partial caprice; and she reaped what she wrought for in a restless, wretched, and devouring harvest of everlasting petty troubles and graver afflictions. What facts are adduced by her panegyrist in a hundred passages in support of his eulogistic opinion?

"Never was there so restless a spirit—never lived a human being so utterly indifferent to the inconvenience to which she subjected others. Nobody could pursue their avocations in quiet: she must give instructions to every one; and although the unexampled versatility of her talents and genius seemed to inspire her with an intuitive knowledge on all matters, yet it was irksome to remain three or four hours together to be taught how to govern one's wife, or how to rear one's children; how statesmen were made, and how ministers were unmade; how to know a good horse or a bad man; how to plant lettuces or plough a field. * * * The love of power made her imperious; but, when her authority was once acknowledged, the tender of unconditional submission was sure to secure her kindness and largesses. All this was royal enough, both in its tyranny and its munificence. Unobserved escape was well nigh impracticable by day, in consequence of the insulated situation of the house on the summit of a conical hill, whence comers and goers might be seen on every side; yet, notwithstanding this, on one occasion all her free women decamped in a body, and on another, her slaves attempted to scale the walls, and some actually effected their object, and ran away. In addition to these artificial barriers, she was known to have great influence with Abdallah Pasha, to whom she had rendered many services, pecuniary and personal; for to him, as well as to his harym, she was constantly sending presents; and he, as a Turk, fostered despotism rather than opposed it. The Emir Beshyr, or Prince of the Druzes, her nearest neighbor, she had so completely intimidated by the unparalleled boldness of her tongue and pen, that he felt no inclination to commit himself by any act which might be likely to draw either of them on him again. In what direction, therefore, was a poor unprotected slave or peasant to fly? Over others, who, like her doctor, her secretary, or her dragoman, were free to act as they liked, and towards whom she had more *menagemens* to preserve, there hung a spell of a different kind, by which this modern Circe entangled people almost inextricably in her nets. A series of benefits conferred on them, an indescribable art in becoming the depositary of their secrets, an unerring perception of their failings, brought home in moments of confidence to their bosoms, soon left them no alternative but that of securing her protection by unqualified submission to her will." [A Napoleon of Lebanon.] * * *

"Her maids and female slaves she punished summarily, if refractory; and, in conversation with her on the subject, she boasted that there was nobody could give such a slap in the face, when required, as she could. * * *

"For the last fifteen years of her life, Lady Hester Stanhope seldom quitted her bed till between two and five o'clock in the afternoon, nor returned to it before the same hours the next morning. The day's business never could be said to have well begun until sunset. But it must not be supposed that the servants were suffered to remain idle during daylight. On the contrary, they generally had their work assigned them over-night, and the hours after sunset were employed by her ladyship in issuing instructions as to what was to be done next day; in giving orders, scold-

ings, writing letters, and holding those interminable conversations which filled so large a portion of her time, and seemed so necessary to her life. When these were over she would prepare herself to go to bed, but always with an air of unwillingness, as if she regretted that there were no more commands to issue, and nothing more that she could talk about. When she was told that her room was ready, one of the two girls, *Zezefôon* or *Fatôom*, who by turns waited on her, would then precede her with the lights to her chamber. * *

"As it had become a habit with her to find nothing well done, when she entered her bed-room, it was rare that the bed was made to her liking; and, generally, she ordered it to be made over again in her presence. Whilst this was doing, she would smoke her pipe, then call for the sugar-basin to eat two or three lumps of sugar, then for a clove to take away the mawkish taste of the sugar. The girls, in the mean time, would go on making the bed, and be saluted every now and then, for some mark of stupidity, with all sorts of appellations. The night lamp was then lighted, a couple of yellow wax lights were placed ready for use in the recess of the window; and, all things being apparently done for the night, she would get into bed, and the maid whose turn it was to sleep in the room (for, latterly, she always had one) having placed herself, dressed as she was, on her mattress behind the curtain which ran across the room, the other servant was dismissed. But hardly had she shut the door and reached her own sleeping-room, flattering herself that her day's work was over, when the bell would ring, and she was told to get broth, or lemonade, or orgeat, directly. This, when brought, was a new trial for the maids. Lady Hester Stanhope took it on a tray placed on her lap as she sat up in bed, and it was necessary for one of the two servants to hold the candle in one hand and shade the light from her mistress's eyes with the other. The contents of the basin were sipped once or twice and sent away; or, if she ate a small bit of dried toast, it was considered badly made, and a fresh piece was ordered, perhaps not to be touched. This being removed, the maid would again go away, and throw herself on her bed; and, as she wanted no rocking, in ten minutes would be sound asleep. But in the meantime her mistress has felt a twitch in some part of her body, and ding ding goes the bell again. Now, as servants, when fatigued, do sometimes sleep so sound as not to hear, and sometimes are purposely deaf, Lady Hester Stanhope had got in the quadrangle of her own apartments a couple of active fellows, a part of whose business it was to watch by turns during the night, and see that the maids answered the bell: they were, therefore, sure to be roughly shaken out of their sleep, and, on going, half stupid, into her ladyship's room, would be told to prepare a fomentation of chamomile, or elder flowers, or mallows, or the like. The gardener was to be called, water was to be boiled, and the house again was all in motion. During these preparations perhaps Lady Hester Stanhope would recollect some order she had previously given about some honey, or some flower, or some letter—no matter however trifling; and whoever had been charged with the execution of it was to be called out of his bed, whatever the hour of the night might be, to be cross-questioned about it. There was no rest for any body in her establishment, whether they were placed within her own quadrangle or outside of it. Dar Jôon was in a state of incessant agitation all night.

"No soul in her household was suffered to utter a suggestion on the most trivial matter—even on the driving-in of a nail in a bit of wood: none were permitted to exercise any discretion of their own, but strictly and solely to fulfil their orders. Nothing was allowed to be given out by any servant without her express directions. Her dragoman or secretary was enjoined to place on her table each day an account of every person's employment during the preceding twenty-four hours, and the names and business of all goers and comers. Her despotic humor would vent itself in such phrases as these. The maid one day entered with a message—'The gardener, my lady, is come to say, that the piece of ground in the bottom is weeded and dug, and he says that it is only fit for lettuce, beans, or *selk* [a kind of lettuce], and such vegetables.' 'Tell the gardener,' she answered vehemently, 'that, when I order him to dig, he is to dig, and not to give his opinion what the ground is fit for. It may be for his grave that he digs, it may be for mine. He must know nothing until I send my orders, and so bid him go about his business.' The consequence of all this was, she was pestered from morning till night, always complaining she had not even time to get up, and always mak-

ing work for herself. Here is another example. A maid, named Sâada, was desired to go to the store-room man, and ask for fourteen sponges. She went, and added, out of her own head, when she delivered the message, 'Fourteen to wipe the drawing-room mats with'—it being customary in the Levant (and an excellent custom it is) to clean mats with wet sponges. In the course of the day, this slight variation in the message came to Lady Hester's ears, and she instantly sent for the culprit, and, telling her that she would teach her for the future how she would dare to vary in a single word from any message she had to deliver, she ordered the girl's nose to be rubbed on the mats; while this injunction was impressed on her, that, whatever the words of a message might be, she was never to deviate from them, to add to them, nor to take from them, but to deliver them strictly as she received them. In fact, she maintained that the business of a servant was not to think, but simply to obey. Truly did old General Loustaunau say sometimes, that, with all her greatness and her talents, there was not a more wretched being on earth. People have often asked me how she spent her life in such a solitude. The little that has been already related will shew that time seldom hung heavily on her hands, either with her or those about her. In reference to the blind obedience she required from servants, Lady Hester Stanhope one day said to me, 'Did I ever tell you the lecture Lord S******* gave me? He and lady S—— had taken me home to their house from the Opera. It was a cold snowy night; and, after I had remained and supped *tête-à-tête* with them, when it was time to go, owing to some mistake in the order, my carriage never came for me; so Lord S—— said his should take me home. When he rang for the footman to order it out, I happened to observe, 'The poor coachman, I dare say, has just got warm in his bed, and the horses are in the middle of their feed; I am sorry to call him out on such a night as this.' After the man had left the room, Lord S—— turned to me, and said, 'My dear Lady Hester, from a woman of your good sense, I should never have thought to hear such an observation. It is never right to give a reason for an order to a servant. Take it for a rule through life that you are never to allow servants to expect such a thing from you: they are paid for serving, and not for whys and wherefores." When Lady Hester Stanhope got up, increasing attention to her own personal wants through long years of bad health had rendered her a being of such sensitiveness, that a thousand preparations were necessary to her comfort; and herein consisted the irksomeness of the service for those about her. Yet this, if ever it was pardonable in any person, was surely so in her; for her nature seemed to lay claim to obedience from all inferior creatures, and to exact it by some talismanic power, as the genii in Eastern tales hold their familiar spirits in subjection."

May all such tyranny, again say we, meet with such return; where there is so little good, there can be no gratitude. But we have done with the *morale* of this miserable body; and would remind our readers that they must look for their entertainment in other features of the Memoirs, the multitude of piquant anecdotes, and variety of amusing descriptions, etc.

"She made the following remark:—'The peers in England may be compared to doctors who have made their fortunes: if they continue to practice, they do it out of regard to some particular families, or from humane motives. They know better than those who are sick what is good for them, because they have had long practice; and if their sons are no doctors, they have heard so much talk about the matter that they sit in a corner and watch the effect of the medicine.' I was struck with the resemblance of Lady Hester's style to Junius's in her letter to Sir Edward. This led me to reflect, as I had observed on many occasions that Lady Hester's language was the counterpart of her grandfather's, whether Lord Chatham might not have been the author of Junius's Letters; but it has since been suggested to me that there would be an absurdity in such a supposition (for I had no opportunity of consulting books where I was), because some of the most eloquent passages of Junius are his panegyrics on Lord Chatham, and it is not likely that he would have been guilty of writing an eulogium on himself; however, I mentioned it to her. She answered: 'My grandfather was perfectly capable and likely to write and do things which no human being would dream came from his hands. I once met with one of his spies,' continued she, 'a woman of the common class who had passed her life dressed in man's clothes. In this way she

went, as a sailor, to America, and used to write him letters as if to a sweetheart, giving an account of the enemy's ships and plans in a most masterly way, in the description of a box of tools, or in something so unlike the thing in question that no suspicion could be had of the meaning of the contents. This woman by accident passed me at a watering-place, whilst I was sitting near the sea-side talking to my brother, and stopped short on hearing the sound of my voice, which was so much like my grand-father's that it struck her. And there is nothing extraordinary in this: I have known a horse do the same thing. My father had two piebald horses: they were very vicious, and hated one of the grooms so, that, one day, whilst he was taking them out for exercise, one threw him, and the other flew at him, and attempted to strike him with his fore feet; but, as he could not succeed, the other, that had run off, turned back, seized the groom with his teeth, and bit him and shook him. That very horse went blind, and got into an innkeeper's hands, who made a post-horse of him. One day, on the high road, I saw him, and made an exclamation to somebody who was with me. The horse, although blind, knew my voice, and stopped short, just like the woman. I, too, was struck with the woman's manner; and, without saying any thing, went next morning at daylight, before anybody was about, to the same spot, and, finding the woman there again, inquired who and what she was. A conversation ensued; and the woman was delighted, she said, to behold once again something that reminded her of her old employer. 'As for the ministers of the present day,' she observed, 'they are good for nothing. When I went to prefer my claim for a pension, one called me Goody-two-shoes, and told me to go about my business.' A government should never employ spies of the description generally chosen—men of a certain appearance and information, who may be enabled to mix in genteel society: they are always known or suspected. My grand-father pursued quite a different plan. His spies were among such people as Logmagi—a hardy sailor, who would get at any risk into a port to see how many ships there were, and how many effective men—or a pedlar, to enter a camp—and the like. This was the way he got information as to the armament at Toulon: and such a one was the woman I have just told you about, who knew me by the sound of my voice. There were two hairdressers in London, the best spies Bonaparte had. A hairdresser, generally speaking, must be a man of talent; so must a cook; for a cook must know such a variety of things about which no settled rules can be laid down, and he must have great judgment. Do you think I did not immediately perceive that those four Germans we met at —— were spies? directly. I never told B— and Lord S—, because they would have let it out again. François was the only one who knew it besides myself. He took an opportunity one day of saying to me, when nobody was by, 'My Lady, one of those Germans.....' 'Yes, yes, François, I understand you,' answered I, before he had said three words: 'you need not put me on my guard, but I am much obliged to you.' 'Why, my lady,' said François, 'when I was one day standing sentry at Bonaparte's tent, there was one of those very gentlemen I have seen go in and out: I recollect his face perfectly.' François was right, doctor: there they were, there was the sick one, and the learned one, and the musician, and the officer, for all sorts of persons. You recollect, when we were at Constantinople, one day I went to meet the Count de la Tour Maubourg on the banks of the Bosphorus, and he intimated to me that I had kept him waiting. 'Yes,' said I, 'there was a spy following my boat: I knew him directly, and wanted to prevent his dogging me.' 'Pooh! nonsense,' replied Mr. de la T. M: but we had not talked for an half hour, when, lo! there he was, taking a look at us. Next day, when I saw Mr. Canning, 'Oh! Lady Hester,' said he, 'how did you spend your day yesterday!' 'Why,' answered I, 'your spy did not spoil it.' 'Ah!' rejoined he, laughing, for he perceived at once it was of no use to make a mystery of what he had done, 'you should not do such things; I must write it home to government.' 'Yes,' said I, 'I'll write a letter, too, in this way:—My lord, your excellent young minister, to show his gallantry, has begun his diplomatic career by watching ladies in their assignations,' &c. &c. And then I laughed at him, and then I talked seriously with him, till I made him cry,—yes, doctor, made him cry. Spies, as I said before, should never be what are called gentlemen, or have the appearance of such; for, however well they may be paid, somebody else will

always pay them better;—unless fortune should throw in your way a man of integrity, who, from loyalty or love of his country, will adventure every thing for the cause he is engaged in: such a man is another sort of a thing!' "

Of Mr. Pitt we are told:—

"She denied that Mr. Dundas had any direct influence over Mr. Pitt, as Wraxall avers. Her words were: 'Because Mr. Dundas was a man of sense, and Mr. Pitt approved of his ideas on many subjects, it does not follow, therefore, that he was influenced by him.' With the exception of Mr. Dundas, Lord —, and another that she named, 'all the rest,' said Lady Hester, 'were a rabble—a rabble. It was necessary to have some one at their head to lead them, or else they were always going out of the right road, just as, you know, a mule with a good star must go before a caravan of mules, to shew them the way. Look at a flight of geese in the air: there must always be one to head them, or else they would not know in what direction to fly. Mr. Pitt's consideration for age was very marked. He had, exclusive of Walmer, a house in the village, for the reception of those whom the castle could not hold. If a respectable commoner advanced in years and a young duke arrived at the same time, and there happened to be but one room vacant in the castle, he would be sure to assign it to the senior; for it is better (he would say) that these young lords should walk home on a rainy night than old men: they can bear it more easily. Mr. Pitt was accustomed to say that he always conceived more favorably of that man's understanding who talked agreeable nonsense, than of his who talked sensibly only; for the latter might come from books and study, while the former could only be the natural fruit of the imagination. Mr. Pitt was never inattentive to what was passing around him, though he often thought proper to appear so. On one occasion Sir Ed. K. took him to the Ashford ball to shew him off to the yeomen and their wives. Though sitting in the room in all his senatorial seriousness, he contrived to observe every thing; and nobody (Lady Hester said, could give a more lively account than he. He told who was rather fond of a certain captain; how Mrs. K. was dressed; how Miss Jones, Miss Johnson, or Miss Anybody, danced; and had all the minutiæ of the night, as if he had been no more than an idle looker-on. He was not fond of the applause of a mob. One day, in going down to Weymouth, he was recognised in some town; and, whilst the carriage stopped to change horses, a vast number of people gathered round us; they insisted on dragging the carriage, and would do so for some time, all he could say. Oh, doctor! what a fright I was in! Mr. Pitt bore with ceremony as a thing necessary. On some occasions I was obliged to pinch his arm, to make him not appear uncivil to people: 'There's a baronet,' I would say; or, 'That's Mr. So-and-So.' I never saw Mr. Pitt shed tears but twice.' "

Of Lord Chatham:—

"Lord Chatham never travelled without a mistress. He was a man of no merit, but of great *sâad* (luck). He used to keep people waiting and waiting whilst he was talking and breakfasting with her. He would keep his aide-de-camps till two or three in the morning. How often would the servant come in, and say supper was ready, and he would answer, 'Ah! well, in half an hour.' Then the servant would say, 'Supper is on the table;' and then it would be, 'Ah! well, in a quarter of an hour.' An aide-de-camp would come in with a paper to sign, and perhaps Lord Chatham would say, 'Oh, dear! that's too long; I can't possibly look at it now: you must bring it to-morrow.' The aide-de-camp would present it next day; and he would cry, 'Good God! how can you think of bringing it now? don't you know there's a review to-day?' Then, the day after, he was going to Woolwich. 'Well, never mind,' he would say; 'have you got a short one?—well, bring that.' "

A personal bit or two:—

"I recollect once, at Ramsgate, five of the Blues, half-drunk, not knowing who I was, walked after me, and pursued me to my door. They had the impertinence to follow me up stairs, and one of them took hold of my gown. The maid came out frightened out of her senses; but, just at the moment, with my arm I gave the foremost of them such a push, that I sent him rolling over the others down stairs, with their swords rattling against the balusters. Next day he appeared with a black patch as big as a saucer over his face; and, when I went out, there were the glasses looking at me, and the footmen pointing me out—quite a sensation! * * * *

"After Mr. Pitt's death I could not cry for a whole month and more. I never

shed a tear until one day Lord Melville came to see me; and the sight of his eyebrows turned gray, and his changed face, made me burst into tears. I felt much better for it after it was over. * * *

"On some occasions she had singular ways of talking; sometimes as if she were addressing herself to the wall, sometimes to her lap; and latterly, when most of her teeth were gone, she mumbled a great deal."

As varieties, we quote:—

"In the cottages of Mount Lebanon there are many things occurring daily which would greatly surprise an English practitioner. A luxation of the shoulder-joint in an infant, real or supposed, was cured, they told me, by taking the child by the wrist and swinging it round with its feet off the ground, until the bone got into place again. I assisted, the second time, at the cure of a sore throat, in a man thirty-six years of age, who suffered a pocket-handkerchief to be drawn tightly round his neck until his face turned black and he was half-strangled. The man declared next day he was well, and the operator assured me it was a never failing remedy."

Not knowing exactly how much dependence we can repose in Lady Hester's recollections, we are not sure whether we may return to these volumes or not. They ought to be better than the common run to deserve serious consideration: for Lady H. is herself a tolerable critic. On one occasion we read:

"Some one—I suppose you—sent me the 'Life of Lord Edward Fitzgerald.' It is *I* who could give a true and most extraordinary history of all those transactions. The book is all stuff. The duchess (Lord Edward's mother) was my particular friend, as was also his aunt: I was intimate with all the family, and knew that noted Pamela. All the books I see make me sick—only catchpenny nonsense. A thousand thanks for the promise of my grandfather's letters; but the book will be all spoilt by being edited by young men. First, they are totally ignorant of the politics of my grandfather's age; secondly, of the style of the language used at that period; and absolutely ignorant of his secret reasons and intentions, and the *real* or apparent footing he was upon with many people, friends and foes. I know all that from my grandmother, who was his secretary, and, Coutts used to say, the cleverest *man* of her time, in politics, business, &c. Even the late Lord Chatham, his son, had but an imperfect idea of all that took place; for he was either absent, or, when not so, taken up by dissipation."

To finish: "The Memoirs of a Peeress," ascribed to Lady C. Bury, was among the books sent to Lebanon; and Dr. M. says:

"I began reading it to her to-day. She was calm and composed. The history of events, so well known to her, seemed to afford her singular pleasure; and it was evident that if she had always sought for amusement in books, instead of spending her time in disciplining incorrigible knaves and wenches, she might have found many happy hours even in the midst of sickness and solitude. Lady Hester had been looking into the book in the course of the day, 'I do not think,' observed she, 'that the heroine's character is hers; it seems to me a fictitious one, made up partly of her own observations, partly of what has happened to herself: if it is anybody, it must mean Lady Caher. Perhaps Lady Charlotte's husband writes the books, and she supplies the materials. The style is not that of a woman like her; she is more likely to set off on foot three or four miles to see how they ploughed at Abra, for example, like an active Scotch woman; but as for writing a book, I think she was no more likely to do it than I am.* I could not write a book, doctor, if you would give me the world. Ah! I could dictate a little to anybody who wanted to write down a correct account of circumstances that I know. I remember Lady Charlotte's first going to court, and the effect was very much what she describes of Miss Mordaunt:—that is, somebody said, 'She is too thin—very handsome to be sure, but too thin:' and somebody else observed, that in a year's time, when she filled out, she would be remarkably beautiful, which turned out to be the case. She was three years older than me; but she had such a hand and arm, and such a leg! she had beautiful hair too, gold color, and a

* "On returning to Europe, I discovered that this novel, although edited by Lady C Bury, was the production of another lady, Mrs. C. Gore. Nevertheless, the observations made on it and on its supposed author are retained, in the hope that each of these highly gifted persons, as well as the reader, will be amused in hearing Lady Hester's comments, made in a different spirit from a critic's in the 'Edinburgh Review,' or the office of the 'Literary Gazette.'"

finely shaped nose, and fine complexion. In about three years she all at once disappeared from the *beau monde:* she married her cousin, who was poor, and was still Lady Charlotte Campbell, but always in uneasy circumstances. When he died, she travelled into Italy for the sake of educating her children, and there she married the tutor: some of those tutors are very good-looking men. There was a daughter of the D*** of B*******, who married a tutor. To be sure they were carroty, although she was the prettiest; but the D*** would not see her for three years, and at last they gave him a living. One of the R****** family also married a tutor.'"

Readers will not be surprised to be told, that, in spite of Lady H. and her biographer, we still hold by the opinions of the *Edinburgh Review* and the *Literary Gazette.*

THE ROBERTSES ON THEIR TRAVELS.

BY MRS. TROLLOPE.

From the New Monthly Magazine.

THE anticipation of brilliant results from the introduction to Mrs. Horace Hopperton were fully and immediately verified, and once again the Robertses found themselves moving in the gayest circle that the place, which for the time being they called their home, afforded. It may truly be said of them that on this and all similar occasions, they very strictly obeyed the good-humored maxim which bids us "look on every thing on its best side." Had they done the reverse they might have discovered in the brilliant-looking throng which filled that lady's three saloons, several individuals whom they would have run out of the room to avoid in home-bred England; but they scorned to bestow their attentions while on their travels upon any thing so contemptible as mere personal character, and devoting their observations entirely to the brighter side of the picture, they perceived to their unspeakable delight that they were again "*keeping company*" (to use their own phrase), with persons to whom their own station in society gave them no right to approach. This was enough; they scarcely asked of the gods to grant them any greater blessing, and might have said, in the words of our Dacre Petrarch,

Let but the cheat endure, I ask not aught beside.

In short, Mrs. Horace Hopperton was one of those persons, who having plenty of money, contrive to find some charm of the genuine "*Duc ad me*" kind (sovereign for "conjuring fools into a circle"), by which they collect princes and black-legs, cardinals and ribald infidels, ambassadors and broken merchants, English peeresses and *ci-devant* French actresses, under their roof, with no other condition annexed, than that they should be, or at least seem to be, tolerably well dressed.

Rome was by no means very full when the delighted Robertses were first installed among the *habitués* of Mrs. Horace Hopperton's splendid palazzo. November was not yet over, and many of those who proposed to make the eternal city their winter residence had not yet arrived, so that in truth they were quite a treasure to her. None but ladies who give a *soirée dansante* every week, can be aware of the value of such an importation as the two pretty Miss Robertses, and their well-dressed brother. Mrs. Horace Hopperton had been greatly pleased also by the bonnet and cloak of Mrs. Roberts at their first interview, nor was she at all insensible to the name of Sir Christopher Harrington, whose title, on referring to her baronetage, she found to be of a very respectably old creation; but when she saw the whole group in full ball costume, their white shoulders displayed to the fullest possible extent, and their peculiarly small waists braced into such miniature dimensions as must of necessity set every body talking of them, she was perfectly enchanted. She civilly lamented the absence of Miss Harrington, who had declined coming with them, but was too well satisfied with those who were present, to think much of the absent, and before the evening was half over, it was evident that she meant to be on terms of very affectionate intimacy with the mother and daughters, and of pleasant playful familiarity with the son.

The impression of that mother's admirable conduct in having got them all admitted to this enchanting new acquaintance, was too fresh in the memory of Agatha, to permit of her adhering to the exclusive system she had begun, respecting the Princess Yabiolporakiosky. She presented mother, sister, and brother, to her admired new friend, and had the pleasure of perceiving

that, though they were not received with the same full-fledged affection as herself, (which of course she did not wish they should be,) yet that they were considered worthy of a very bewitching smile a piece. And, in truth, to people who valued either princessly smiles, or beautiful smiles, those of the Princess Yabiolporakiosky were worth having, for the name and rank of her husband were of high nobility, though the autocrat of all the Russias had thought it best, in consequence of a *bon-mot* which had been reported to him as having been uttered by the prince, to request him to take up his abode for a few years in Siberia; and as to the *beauty* of her smiles, it would have been difficult to find any more universally, or more deservedly popular. The Princess Yabiolporakiosky was, in truth, a *very* beautiful woman. The accident which had befallen her husband in the manner above related, had induced her to ask the emperor's permission to travel, which had been graciously granted, and this was the fair creature's second winter in Italy. That her *salon* was one of the most distinguished in Rome, is quite certain; but to persons unacquainted with the mysterious anomalies of continental society, a detailed description of the elements of which it was composed would appear much too absurdly improbable to be credited, and therefore no such description shall be attempted. Let it suffice to say that English fathers and mothers, when they decide upon finishing the education of their daughters by a continental tour, should not invariably receive the words DISTINGUISHED SALON, as a certificate of the respectability of the assemblies to which it is applied.

No previous success of the Roberts family had produced sensations of more unmixed delight among them, than did the manner in which they were received by all to whom they were presented on this eventful evening. The Roman winter was, as we have said, only just beginning, and a group of young faces, even if less handsome than those of the Robertses, would have been well received by those who were self-elected as ball givers for the ensuing season; and when, in addition to their good looks and becoming dresses, it was discovered that they all waltzed well, it seemed to be at once decided that they were to be taken into general favor, and made *the fashion*.

In whose favor was such a beneficent resolution ever taken without their immediately becoming sensible of its flattering effects? Again, again, and again, did Mrs. Horace Hopperton win her not easy way to the delighted Mrs. Roberts, stating the wish for an introduction to her and her charming family, not only from the dancing gentlemen, who pleaded for the happiness of waltzing with the new beauties, but also from the still more important individuals in whose various drawing-rooms this first object of youthful existence was to be carried on.

In short, the evening's amusement was perfect in every feature, and when, as they drove home, Maria said, addressing her companions *en masse*, "Did you ever spend a more agreeable evening in your life?" the word "*never*" was most cordially uttered in reply by them all.

So far all was well, nay, more than well, despite the heavy disappointment which had greeted their arrival, and Rome from the "dirtiest, dullest old place they had ever seen," had already become in their estimation one of the most enchanting residences in the world. But, alas! in this defective state of existence, it is difficult, if not impossible to enjoy any felicity, however great, without some drawback, some alloy, which if it does not destroy, at least in some degree dims its brightness! That night Mrs. Roberts and her three children went to bed in a state of perfect contentment. The past, and all its difficulties, its fears, and its regrets, vanished from the memories of all; their dropping to sleep was delicious, and their dreams ecstatic. But at an early hour on the following morning Mrs. Roberts contrived to get her three children round her, and though still looking, on the whole, vastly more light-hearted than she had done since the Lynberry, and the Montgomery, had left Baden, she said to them, in an accent in which considerable anxiety might be detected,

"And now, dears, what do you think we must do about a carriage? I had certainly completely made up my mind that for this winter we must content ourselves with hiring one, when we absolutely could not do without it; but now, your poor father is positively killing himself with anxiety about the money—and yet—it really is very difficult to decide—every thing seems to open before us so brilliantly, doesn't it? Do tell me, dears, what you think I ought to do?"

Maria looked at her elder sister, and so did Edward too, but as he did so he shrugged his shoulders, and said, "The question

in my opinion lies in a nut-shell—I should not suppose there could be two opinions on the subject."

"Nor I either, I confess," said Agatha. "As to my father's nervous vagaries, ma'am, he has been subject to them as long as I can remember any thing. Don't you recollect the way he put himself into, the year before last, when you proposed my having riding lessons? I had the lessons though, a dozen of them, and he was never a bit the worse for it. And to tell you the truth, ma'am, my own opinion decidedly is, that if your plans and views respecting us, are to be dependent on my father's whims, you have done very *very* wrong to bring us abroad. The doing so was decidedly a great effort, a very great effort—it showed great courage and decision of character on your part, for of course we all know that you were the author of the scheme; and I cannot but think that if you will recall to mind the sort of society to which we were accustomed in London, and then contrast it with that in which we were so flatteringly received last night, you will be ready to allow that, so far, all your hopes have been realized."

"They have, indeed, Agatha, and more—oh! a thousand times more than realized! Nevertheless, I won't deny that in a pecuniary point of view the coming abroad has *not* answered so well as I was led to expect it would do. But on this point I have surely no reason to blame myself. I suspect that the people from whom I got my information did not get into the sort of society that we have done, and this of course is quite sufficient to account for the difference."

"Most certainly it is, ma'am," replied Agatha, with a little laugh that seemed to throw ridicule upon the idea that there could be any doubt about it; "and though I never, as I am sure you will allow, make you fine speeches, but on the contrary, speak my real opinion on all subjects with the most perfect sincerity, I must say that I think the manner in which you have managed to bring us forward, and place us, as you have done, in the very first class of European society, does you infinite honor. And I certainly shall be very sorry, not only for our sakes, but for yours, if you suffer your plans and manner of going on to be paralyzed by the weakness of my father's character—who is evidently, poor man, very fast declining into old age and imbecility. Some people do grow old so much sooner than others! I don't suppose that he is not much above ten years your senior, yet I am sure any one would suppose he was twenty or thirty years older than you are."

"Yes, poor dear man! he certainly is growing old apace; I see it as plainly as you do, Agatha," replied Mrs. Roberts, pitifully shaking her false curls; "but still, you know, it is *his* signature, and not *mine* that must bring us the supplies; and as he never ceased all the time we were at Baden to make a fuss about our constantly having a carriage, I am afraid I shall find it very hard work to make him consent to it here. And yet I confess I do not see how it is possible for us to get on without it."

"Out of the question, ma'am, utterly out of the question," returned Agatha. "It would be infinitely better at once to make up our minds to refuse all invitations, and to pass the rest of our winter at Rome exactly in the manner in which we passed the first week, than to beguile ourselves with the belief that we can associate with such people as we were introduced to last night, without having a carriage."

"Good gracious, Agatha! don't say that!" exclaimed Maria, with a look and voice of the deepest melancholy. "I do think it would be quite too hard upon me, after I have exerted myself as I have done, and roused all my proper pride to bear the disappointment of not finding Lynberry here with proper spirit, I do think it will be too hard upon me, Agatha, if you try to persuade mamma that it will be best for us to give up going out! I am sure that as far as I am concerned, I would a thousand times rather *walk* to the parties than not go to them at all."

"Well, my dears, if you would all of you make up your dear minds together, to try such a scheme, I won't throw any difficulties in the way of it. I dare say I could have a stout pair of clogs made that would keep my feet dry, and with good cloaks and umbrellas, one may do a great deal. And I own I quite agree with Maria in thinking that it *would* be much better to walk to the parties than not to go at all, and pass our time in the horrid dismal way we did last week," said Mrs. Roberts.

Had not the indignation of Agatha at this proposal been really too great to leave her the power of speaking, her mother would not have reached the conclusion of her last speech without interruption; but having at length found breath, she said, with flashing eyes and energetic aspect,

"I must beg that I may not be forced to listen to such absurdities, ma'am, as you and Maria have just thought fit to utter. I am in earnest, and if you are in jest, as you were yesterday, I request that you would be pleased to tell me so. I can employ my time better than in listening to such very absurd *plaisanteries*."

"Upon my word, Agatha, I was not in joke," replied Maria, with more courage than her mother at that moment ventured to display, "I assure you, Agatha, I mean exactly what I say. I *would* rather a GREAT, GREAT deal rather walk in mud-boots to such a party as we were at last night, and deliberately sit down in the anti-room, and take them off before the eyes of all the servants, than not go at all. But I don't tell you, Agatha, that I think it would be wise in mamma to make us do it. Nor do I in my heart believe it absolutely necessary."

"Necessary!" repeated the indignant Agatha, still pale with anger; "necessary? And pray, if that be necessary, why is it not equally so that we should lodge ourselves with the veterino drivers, and other refuse of the people? What is the difference, I should like to know, between the one degradation and the other? I see none."

"No difference, Agatha, between lodging with stable-boys and drivers, and the not having a carriage of our own?" said Mrs. Roberts, reproachfully. "Oh! Agatha!"

"There is no difference, ma'am, in the principle—none whatever. In both cases we should be placed without the pale of good society. And *that*, THAT, once submitted to, I should care not a straw, as far as I am concerned, for any thing else that could happen to me."

"It is impossible not to admire your noble feelings, my dearest Agatha," returned her mother, touched to the very heart by such a display of high-minded superiority; "and yet, my dear, if you will quietly think of it for a minute, you will see that it is not my admiring you ever so much that can raise the money for paying the carriage. Isn't that true, Agatha? Now don't be unfair, my dear girl, but confess honestly at once that what I say is true."

"Indeed, ma'am, I shall confess no such thing," returned Agatha, "for I should falsify every feeling and every opinion if I did. My knowledge of human nature convinces me that when the will is firm, steadfast, and uncompromising, NOTHING can stand against it. I know not, my eyes never beheld the man capable of making *me* change any opinion I had formed, or any resolution I had taken. And I leave you to guess, therefore, in what light I must view your doubts and fears respecting my father's liking or disliking that a carriage should be hired."

"Yes, yes, dear Agatha," replied her mother, "I quite understand that. But after all, my dear, it is not so much his likes or dislikes as the money. I do really believe that such a fine mind and noble character as yours might be capable of almost every thing in the world, except finding money where there is none. But even you, Agatha, must confess *that* to be impossible."

"Upon my word, ma'am, I must again repeat that I shall confess no such thing," returned her daughter. "I presume that when you use the word *money*, you do not literally mean the sovereigns and dollars that are tossed about for daily use? Of course you cannot be quite so childish as that. I really do not suspect you of it. You speak not of *coin*, but of means. The steadfastness of will, and the firmness of purpose to which I allude, will certainly not expend itself in seeking shillings and sixpences in odd corners where they are not to be found. Its sphere of action is somewhat higher than that, ma'am. I will not attempt at this moment to enter upon any general explanation of the various ways by which a powerful mind is able to control circumstances, but will only say, what in fact is all that is necessary at the present moment, that were I you, ma'am, I should instantly commission Edward to find his way to the first establishment for letting out carriages in Rome; to select two of the handsomest-looking and most commodious equipages he can find, one open for the mornings, the other close for the night work, and to engage the use of them for three months certain, together with a good pair of horses and a respectable coachman. This is what *I* should do; and as to the payment for them, I should trust for finding wherewithal to the same energy of character which dictated the ordering it. Do this, ma'am, without wasting any superfluous anxiety upon the subsequent question of ways and means, and depend upon it every thing will go on smoothly."

"Indeed, Agatha, I feel it would be folly not to lean for support upon such a character as yours. It would be ungrateful to Providence for having bestowed on me the blessing of such a daughter!"

And Mrs. Roberts was so much touched as she uttered these words, that she drew out her pocket-handkerchief and blew her nose.

"Go, then, my dear Edward," she resumed, "go, and do for us the good service that your dear sister has suggested; and you may order the carriage to come to the door this morning at two. She is an extraordinary creature, Edward, isn't she?" added the proud mother, slightly passing her pocket-handkerchief across her eyes.

"Why yes, ma'am, Agatha is up to a thing or two," replied the young man, "there is no denying that."

It did not greatly signify, for if it did not come to pass one day, it certainly would another, but it so chanced that poor Mr. Roberts happened to be standing in the little balcony upon which the two windows of the drawing-room opened, when the carriage thus obtained drove up to the door, with Edward lounging on the front seat of it.

"Dear me, what a gay carriage!" said he, stepping back into the room, and addressing his wife, who, unluckily for her, was busily engaged in putting together the component parts of her last new bonnet, which, for the convenience of packing, had been taken to pieces. "Whose smart carriage can this be, I wonder, and how has Edward contrived to get into it?"

Heartily did Mrs. Roberts wish that she had contented herself with the dim light of her bed-room, instead of venturing at such a moment into the general sitting apartment. But her employment had beguiled her into a complete forgetfulness of time, and it was, in fact, later by an hour than she supposed it to be. She now gathered up her work in haste, and was hurrying from the room, seemingly without having heard the half-exclamation, half-inquiry of her husband; but the worthy gentleman had not yet reached that state of morbid indifference to what was going on around him, which is sometimes found by such active and excellent managers as Mrs. Roberts, to be the most agreeable mood of mind that a husband can be brought into—this mood he had not yet fully reached, and gave proof of it by repeating with very troublesome pertinacity, "Whose smart carriage is that?"—nay, he even exerted himself sufficiently to lay a restraining hand upon the lock of the door while he mildly but earnestly said, "Do tell me, Sarah, whose carriage that is?"

"Whose carriage? why the livery-man's carriage, to be sure. What can his name signify? Don't hold the door in that way, sir, but open it, if you please, directly. I don't want to keep the girls waiting," said Mrs. Roberts, boldly.

"Stay long enough, wife, to answer me one question," returned her husband, still resolutely keeping his hand on the lock of the door, "tell me if that carriage is hired for you? That is to say, Sarah, have we got to pay for it?"

"Pay for it!" cried Mrs. Roberts, in an accent of profound contempt, "what a perfect curmudgeon you do grow, Roberts! I wonder you don't ask who is to pay for every morsel of bread we eat. Once for all, sir, I wish you to understand that I will not be interfered with in my domestic arrangements. Nobody yet ever suspected me of not knowing how to manage a family. I have been married to you five-and-twenty years, sir, and you won't deny, I suppose, that I have been always looked up to by every body as one of the very best of managers. I never asked any of my neighbors yet what I ought to get for my family, and what I ought not, and I don't mean to begin now, I promise you."

"Then, Sarah, I am a ruined man!" exclaimed Mr. Roberts, in a voice that trembled from very genuine emotion. "That desperate manner of speaking shows it as clear as light. 'Tis all humbug, Sarah, all that you have been saying to me about our affairs, for months past, is all humbug!—Where are the girls' lovers that you talked about? Where is the chance of Edward's getting the rich young lady for a wife? Doesn't she shut herself up from you all, as if on purpose to show that she won't have him? It is all humbug, Mrs. Roberts, all humbug, and I am a ruined man!"

"If you are ruined, it will be your own fault, and nobody else's," returned his wife, with vehement indignation, arising from the consciousness of her own enlarged views, contrasted with the pitiful littleness of his. "It is easy enough to see the sort of way you would take, in order to keep your children back in the world, and prevent them

from rising a single peg higher than you have managed to do yourself. But *my* children have too much of their mother in them to bear it, and so you will find, sir. It may, perhaps, be in your power to prevent the great, the unhoped-for advantages with which they are now surrounded from doing them any real good. I dare say it may be in your power to do that. But it is not in your power, nor ever will be, to turn them back again into poor tame ignorant clods, contented with having as much food as they want, and clothes enough to keep them warm. You'll never be able to turn the chosen friends of nobles and princesses into such animals as that; and the consequence of your making a stand against drawing for sufficient money for the necessary expenses of our present station in life will be following our children to an early grave. I don't mean to talk about myself. I know you don't consider me now of much consequence to any body. You have taken it into your poor old head that nobody knows any thing but yourself, and you may soon dance over my grave by way of proving you are right."

At this point, indignation and contempt gave way to grief, and Mrs. Roberts drew out her pocket-handkerchief, and wept violently.

"Sarah!" said her husband, after a short sharp struggle with his common sense, which was beat out of the field by his habitual deference and habitual affection for his wife, "Sarah!" he said, "I am many years older than you, and if one of us is doomed to die of a broken heart it had better be me. But just let me say one last word, and then go on as you think best. My belief is that we shall all be ruined—downright, positively ruined by the trying to live among all these fine folks. But don't cry any more, Sarah, don't cry. I am willing to do whatever you like. I am sure you mean to do every thing for the best, my dear, and if it don't answer, why I am sure it won't be the fault of your will; so don't cry, Sarah! and you shan't find that I'll plague you with my dismal forebodings any more."

"Keep but your word in that, my dear Roberts," she replied with sudden animation, and raising herself on tip-toe to give him a kiss, "keep but your word in that, and depend upon it that every thing will go well, and we never shall have any difference between us again."

The good man sighed, but not ostentatiously, returned his wife's kiss very kindly, and then threw open the door for her to pass. But Mrs. Roberts was at that identical moment very nearly penniless; the large supply drawn for before they quitted Baden having been so nearly absorbed by the unexpected amount of the various claims upon her, as barely to leave sufficient for the journey; the two hundred pounds which she had calculated would remain, with which to commence their Roman campaign, having so completely vanished as scarcely to have left a trace even on her memory. She felt, therefore, that she should by no means be doing her duty to herself and her dear children, if she omitted the present very favorable opportunity of obtaining a further supply, and she therefore said, in a pleasant, confidential tone, which could not fail of being soothing to the feelings of her husband, who had not of late been treated with much attention by his greatly occupied family—

"Nay, shut the door again, dear Roberts, I have a hundred things that I want to say to you, and lately you have always seemed so poorly, and disinclined to talk, that I have not liked to trouble you; but I wish to tell you, my dear, that you are quite mistaken about Edward's match with Bertha being off. It never was so perfectly certain as it is at this moment. She is an odd tempered girl, I won't deny that, and if Edward was a common sort of character I might perhaps have some anxiety about his being happy with her. But he is so very superior, and has such uncommon powers of mind, and knows how to influence those he lives with in such an extraordinary manner, that I feel no alarm on that score. So there you may be easy, my dear; and as to the girls, they have only to be seen! In your life you never beheld any thing like the fuss that was made with them last night!—There were no less than five noblemen and one prince that desired to be introduced to them; and the ladies of the very highest rank that desired to make my acquaintance was really something quite extraordinary! But of course you know that though we may be quite sure that all this sort of thing must sooner or later lead to the permanent establishment of our dear children in the exalted station of life for which they are evidently so peculiarly qualified—though we cannot with any reasonable use of our eyes and understanding doubt *this* final result, it is impossible to deny that a little present ready money is absolutely necessary, and what *I* feel, Roberts, is that we

ought to be thankful to Providence—very thankful indeed—that enabled you by a little steady industry and perseverance, to realize enough to enable us to conquer what I have no doubt has often proved an insuperable difficulty to many people. And it is this consideration, my dear Roberts, that ought now and always to prevent your feeling any repugnance for drawing for the necessary supplies. Trust me, my dear, it will all come back to you, and with interest. I did not mean to say any thing about it till to-morrow, because we have several calls to make to-day, but as we are upon the subject, it will save us both trouble if you will give me a draft now. I understand that if people can show that they have any decent introductions here, Torlonia will cash a draft at sight, and I am sure that will be monstrous convenient just now, for the journey has left me quite dry."

During the latter part of this speech Mrs. Roberts had been engaged in bringing forward and unlocking her writing-desk, which contained all she wanted for carrying through the business she was upon.

"Let it be five hundred, Roberts, will you dear? Less than that will really be of no use at all."

"But don't you expect a remittance from Miss Harrington's aunt, my dear?" said Mr. Roberts, holding the pen she had given him suspended over the paper. "If I don't mistake, it is several weeks behindhand."

"What, Bertha's hundred pounds for this current quarter? Oh no, my dear, it is not behindhand at all. How could you suppose that such a manager as I am could have suffered that? Oh no! we got that just before we set off from Baden; and lucky it was that we did, for we never should have got here without it. But do write the draft, my dear Roberts, will you? The poor dear girls will think that I have quite forgotten them."

Mr. Roberts re-adjusted the paper before him, dipped the pen in the ink, and wrote the draft for the sum named. But before he signed his name to it he paused, and seemed for a minute or two deeply absorbed in thought. During this interval the countenance of his wife became greatly overclouded, and a look of red and resolute purpose succeeded to the radiant good humor it had before exhibited. After the pause described, Mr. Roberts, pushing the paper a little away from him, looked up in the face of his wife. If any thought of remonstrance still lingered in his mind, it vanished as he did so, and in the next moment his name was subscribed to the draft.

The next time that the voice of Mr. Roberts was heard to utter a command, it pronounced these words to his youngest daughter: "Maria, order the man-servant to let me have hot water, sugar, and brandy, brought to me every evening before he goes out with the carriage." And this order was given and obeyed.

While the affairs of Mrs. Roberts and her children went on thus prosperously at Rome, those of Mr. Roberts and Miss Harrington, who were both left pretty much to their own devices, were managed on principles diametrically opposite to any which regulated the movements of the rest of the family, but which resembled each other very closely. For while Mrs. and the two Miss Robertses, together with Mr. Edward Roberts, were making the most vehement exertions, and with great success, to pass as many hours of their existence as possible in a crowd, Mr. Roberts and Miss Harrington limited their quieter labors to the endeavor of keeping themselves in their separate little spheres, as much alone as possible.

As to Mr. Roberts, poor man, he had made up his mind to live peaceably, trouble nobody, and trust to chance for what was to come next. He had meditated a good deal before he had reached this state of mind on the two very different terminations predicted by himself and his wife to the race they were running. These meditations had by no means lessened his fears, or strengthed his hopes; but the more he reflected on the leading features of his lady's character, and the more meekly conscious these sober reasonings made him of his own, the more deeply he became convinced that though it might be in his power to make them all lead a life of wrangling dissension, it was not in his power to keep them within the bounds of what he considered to be prudence, and he therefore deliberately and resolutely decided upon letting them have their own way. He thought it most likely his wife would stop short before she had spent quite all that he had belonging to him, and that the best thing he could do would be to prepare himself for the manner of life which he thought likely, at no very great distance of time, to follow that which they were pursuing at present. He posi-

tively refused to have either a new coat or a new hat, both which articles were certainly wanting to render his appearance fit for exhibition. He freely acknowledged this to be the case, but brought the argument to a conclusion by declaring that he did not like to go into company, and therefore should always stay at home. The resolution thus proclaimed was not perhaps altogether disagreeable to his family, and Mrs. Roberts did not look at all angry as she replied, "Well, my dear, if you feel *that*, I don't see any use in the world in dragging you about and keeping you out of your bed, when I dare say it would be a great deal better for your health that you should be in it. And if that's settled, you are quite right about not having a coat, for Heaven knows it is the duty of both of us to spare every thing we can in the way of expense, just at the very time that the dear children are wanting every farthing we can manage to spend, in order to prevent their losing the great advantages of what we are doing for them."

"Very well, Sarah, then we are agreed about that," said Mr. Roberts in reply, and not wishing to hear any more just then of the "great advantages" of which he had already heard so much, he left the room as he spoke. It was within an hour or two of this conversation that Mr. Roberts gave the order for the constant supply of brandy and water which has been mentioned above, and those who had seen him as he stepped on board the steam-boat on the Thames, rather less than eighteen months before, had they looked at him only one month after this new arrangement had taken place, would either not have recognized him at all, or would have imagined that he must be under the influence of some slow-working poison, which, though it did not appear immediately to threaten his existence, must sooner or later bring him to the grave.

Nor would such imaginings have very widely erred. But though strong brandy-and-water, taken constantly and copiously, is probably far from wholesome, it could not, unaided by other causes, have wrought this sudden change, though it might have assisted it. The case, however, is not a rare one, though it has not been much examined into or commented upon. Poor Mr. Roberts is not the only man who has been coaxed into leaving his native British home for the sake of saving money and improving his sons and daughters, and who has discovered too late that neither of these objects has been obtained by his expatriation. He is not the first who has felt that among all the new and startling objects which encompass him with oppressive strangeness in a foreign land, the most new, the most startling, and the most painfully strange, is the aspect and bearing of his own family. Let it not be supposed, however, that this observation has the remotest reference to one of the highest and most rational enjoyments of civilized life, namely, that of travelling in search of all that is best worth looking upon in nature and in art. It would indeed be absurd to confound the happy power of travelling far and wide for the purpose of bringing home the memory of objects which may be dwelt upon with pleasure through a long life, with that of running the desperate risk of exchanging a native home for a foreign one. The doing this where there is a reasonable hope of improving health thereby is quite right. Nay, there is probably nothing very importantly wrong in it, where a man and his wife, having no children, have nothing but their own pleasure to consult; and still less, perhaps, can those who are doomed to content themselves with single blessedness, be blamed for seeking amelioration of their solitary condition, wherever they fancy it likely to be found. But alas! for the facile husband and indulgent father who yields his judgment to the ambitious aspirations of his woman-kind, and decides upon taking up his abode upon the continent!

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The similarity which has been alluded to between the mode of life of Mr. Roberts and that of Miss Harrington, did not extend to the brandy and water, indeed, it chiefly consisted in the determination of both not to join in the festivities to which the rest of the family were devoting themselves.

It could hardly be expected, perhaps, that any girl of seventeen could be thrust out from her natural home in the way Bertha Harrington had been, and thrown among strangers, without graver consideration given to their fitness for the charge, than had been deemed necessary in her case, without some injurious effect arising from it. Bertha was still a pure-minded, affectionate, unaffected girl, but she had become much too indifferent to the opinions of others (with the exception at least of one single individual), and too much disposed to believe that the only thing necessary to be attended to in the disposal of her time,

at least for the present, was her own amusement, or, as she would have herself called it, her own improvement. The extreme repugnance with which the style and manners of the Roberts race had inspired her, led her to believe that the first thing needful to the regulation of her own conduct, was to keep out of their way; and to achieve this she certainly permitted herself a degree of independence in her proceedings, which could not safely be received as admissable in any code of young lady-like regulations. Of all the books treating of Rome and its marvels, which she had chanced to get hold of, the "Corinne" of Madame de Staël had made the deepest impression. It was in fact her hand-book, her *vade mecum*, her delight. As to all the latter part of it, she had read it once, wept heartily, classed the hero in her mind as one of the vilest of the human race, and then turned back to the immortal pages sacred to Rome. To see all that Corinne saw, was the first wish of her heart, and the first resolve of her bold young spirit. She blushed in her solitary chamber as she caught herself wishing that her cousin William was there to go every where with her, as wicked Lord Neville had done with Corinne, and then she almost exclaimed aloud at the sin of letting such a false wretch as Neville enter her thoughts in connexion with Vincent. And then she took herself very severely to task for suffering herself to wish for her cousin William at all. That, all goodness and all kindness as he had been to her, he did not wish to be with her was quite plain, and she only began to flatter herself that she was not, respecting her feelings for him, exactly every thing that she should most have hated to be, when it occurred to her that, after all, there was nothing perhaps in the world that she should really and truly like so well as hiring a valet-de-place to be in constant attendance upon her every morning.

It required some exertion of the independent spirit to which her peculiar circumstances had given birth to enable her to do this. Money she had at her command to a much greater extent than the Robertses were aware, for her mysterious father had commissioned Lady Morton, soon after her arrival at Baden, to transmit to her circulating bills to the amount of two hundred pounds, with an intimation that an equal sum would be added to her private income as long as she continued abroad. This sum was as yet untouched, and it was her purpose to make a visit to the banking establishment of Messrs. Torlonia part of one of her earliest excursions, under the protection of her intended valet-de-place.

It took her a good while to decide upon the best mode of obtaining this necessary attendant, at length she determined to ask the master of the circulating library in the Piazza di Spagna if he could recommend such a person. To this library she had already found her way on foot, and by the aid of her very quiet dress, and a thick veil, she had managed to go and come (the distance was but short) without any misadventure whatever. Her application to the master of this little establishment was perfectly successful, as was also the request that she might meet the important person he recommended at his shop on the following day, in preference to his coming to her at the lodgings, which might lead to questionings and discussions that she wished to avoid.

The meeting thus arranged took place with as little delay as possible, and the result enabled her to set forth the next day in a respectable looking carriage provided by her new attendant, with "Corinne" in her hand, and all her soul in her eyes.

But this masterly arrangement was not achieved without a vigorous attempt on the part of Mrs. Roberts to discover what the young lady was about. Conscientiously satisfied, indeed, that the alliance so happily secured for her with Edward, must effectually protect her from any possible ill consequence arising from the gossiping of idle tongues, she would have deemed any interference with her profitable young boarder's whims, as an act scarcely less sinful than suicide, and on this occasion, therefore, as well as on various former ones, she resolved to keep clear of any such wickedness. But, to say truth, there were other grounds on which the daily sight of this independent carriage alarmed her. Bertha, as it may be remembered, had once hinted, upon being asked to contribute to the expense of the Baden carriage, that she conceived the four hundred per annum which was paid for her accommodation in Mrs. Roberts's family was intended to include it—a startling sort of reply this, which had never been forgotten, and which had gone far towards establishing the very unusual degree of independence which the young lady enjoyed. And now, though it must be confessed that there was in the self-assured step with which the youthful Bertha daily de-

scended the stairs to her mysteriously obtained equipage, enough to alarm the most liberal-minded chaperon in existence; and though the extraordinary composure of manner with which she might be seen, day after day, to give commands to her attentive valet-de-place as to the order of the morning's excursion, would naturally have suggested to most ladies holding the responsible position assumed by Mrs. Roberts, that it would be quite as well to know how she disposed of herself during these long mornings, she was vastly less anxious as to any personal risk which the presumptuous young lady might run by so unusual a mode of proceeding, than concerning the possibility that the "*idiot girl*" as she still sometimes affected to call her, might have taken it into her head to hire carriage, horses, coachman, and footman, all upon the Robertses' credit. As to the first, it would be easy enough for Edward to set all that to rights by and by; but as to the last, she conscientiously felt it to be her own especial duty to obtain information.

When this alarming possibility first suggested itself, the ample countenance of Mrs. Roberts glowed from forehead to chin, and from ear to ear. It was certainly very delightful to drive about in the enjoyment of the unrestrained conversation of her own children, but she felt that the disagreeable presence of Bertha must be endured by them all, if the annoyance was only to be avoided by having to pay for a second carriage.

The very earliest possible opportunity was seized by Mrs. Roberts for a *tête-à-tête* with Miss Harrington, in order to put this important matter upon a proper footing; and although the obtaining this was no very easy thing, from the strict blockade by which Bertha contrived to protect her own room, and the very few minutes which, except while at table, she spent out of it, perseverance at length accomplished it, and Bertha found herself alone with Mrs. Roberts, and that lady stoutly standing between herself and the door.

"I beg your pardon, my dear," began the careful chaperon, "for stopping you, because you seem rather in a hurry; but I can't think I should be doing right, my dear Miss Bertha, if I didn't make any observation about your driving about the town all alone as you do. You know, my dear, that there is always, of course, a place kept vacant and ready for you in our carriage whenever you like to go out, and I therefore really don't see what occasion you can possibly have for another."

Poor Bertha, even in the midst of her resolute and unflinching resolution to follow her own inclinations till her cousin Vincent should again be near enough to substitute his, as her rule, indeed even at the very moment that she braced her spirit to withstand every possible interference, felt that her much disliked hostess had some show of reason for her remonstrance, and though her will was steadfast, her voice was gentle, as she replied,

"A carriage entirely at my own command is necessary for me, Mrs. Roberts, because I want to go to places where nobody else wants to go, and I willingly pay for it myself, in order to avoid putting you and your daughters to the inconvenience of giving up any engagements of your own, in order to accommodate me."

"Well, my dear, I am sure it is impossible to say any thing against that, because it is just the sort of genteel politeness which every one would like to see in a young lady of your rank and fortune. And I suppose, my dear, that you are quite sure that you have money enough to pay for it?"

Had Mrs. Roberts said one single syllable expressive of anxiety lest her young inmate might attract attention, and be deemed indiscreet, from the unprotected style in which she pursued her amusement, it might have gone far towards making the poor little girl more cautious in her proceedings, for there was no mixture of audacity in her courage, no wish for exemption from any restraint for which she could feel respect, but this allusion to her purse and its resources was most unfortunate. It offended and disgusted her in every way; and more than ever determined to assume the entire disposal of herself till she should be happy enough to be again within reach of advice and protection which she could recognize as fit and proper, she brought the conversation to an abrupt conclusion by saying,

"Till I have given you some reason for it, madam, you have no right to suppose me capable of contracting debts which I am unable to pay; and unless you wish me immediately to take measures for finding another home, you will do well to abstain from such interference with my conduct as may render my present abode intolerable to me."

"Dear me, Miss Harrington, I am sure

I would not do any thing of the kind upon any account whatever; on the contrary, my dear, I make it quite a point of honor towards your dear aunt to render all things as agreeable to you as possible."

Such was the placable rejoinder of Mrs. Roberts, having quietly listened to which, Bertha left the room with the air of a young princess, graciously accepting an apology for some inadvertent offence offered to her greatness.

"Won't Master Edward bring her down a peg or two, I wonder?" said Mrs. Roberts to her daughters, as she concluded her description of the above scene.

"If he does not," replied Agatha, "he will richly deserve to be brought down himself."

A SKILFUL pen, acting as a conductor to a tolerably observing mind, while engaged in ransacking Rome, might still find wherewithal to cover a good deal of paper in the genuine Corinne vein. But start not, gentle reader! No such hazardous attempt is about to be made here, either for your delectation or annoyance; it shall suffice to repeat that Bertha Harrington wearied not in the path she had chosen for herself, but persevered with an appetite that seemed to increase with what it fed on, in visiting and revisiting (and then coming back again to get another look) all the most cherished objects which that immortal museum contains.

Now, though it had been gravely debated in the Roberts family only a few short months before, whether Miss Harrington was handsome or ugly, though she had been strongly suspected during that interval of being little better than an idiot in capacity, and though, worst of all perhaps, she dressed with no other object than to make herself as little conspicuous as possible, she nevertheless did not quite escape observation. Had she indeed been less lovely than she really was, the manner in which she was perpetually seen by those who had the same pursuits as herself, rambling in solitary enjoyment, and with no other protection than that afforded by an ordinary valet-de-place, from one end of Rome to the other, could scarcely fail of drawing a good deal more attention than she was at all aware of. But so utterly ignorant was Bertha of all that an acquaintance with the world can teach, and which nothing else can, that she felt as snugly secure as if she had been shut up in cotton; and as she rarely looked at any man or woman, except such as were made of marble, it did not occur to her that the more insignificant portion of the creation formed of clay might, by possibility, take it into their poor mortal heads to look at her. This oversight on her part was unfortunate, as it exposed her to much that it would have been desirable she should avoid.

More gay young eyes had looked at her, and more gay old ones too had taken the same direction, than it is at all necessary to enumerate; one single anecdote will suffice to show to all whom it may concern, the danger of a young lady's fancying that she can take care of herself, without better assistance than that of a valet-de-place.

It happened that Bertha had worked up her fanciful young mind into a state of great enthusiasm for the Pantheon. There was something in its form and proportions, in the unwonted manner in which "thoughts commercing with the skies," might be followed by eyes wishing to commerce with it also, as well as in the contrast between its past and present dedication, which drew her again and again beneath its beautiful dome, and often as she drove along the Via Sacra, she never failed to give it a fond look, which very often led to an affectionately long visit.

Twice had her accomplished valet-de-place followed her into the building, and twice followed her round it, reciting all the records concerning it, which it is so perfectly necessary for an unlearned lady to hear once, but so exceedingly annoying to listen to a second time. On her first visit she heard him with great attention, but during the second, her manner so evidently showed this intelligent official that his antiquarian lore was no longer required, that when she entered the building for the third time he reposed himself on the step of the carriage as long as she stayed. This man, however, though professionally devoted to time past, was not so entirely withdrawn from time present as not to remark the singularity of his young mistress's mode of life. He had lived long enough in the world to know that when pretty young ladies are in the habit of appearing abroad without any protection at all, they are generally supposed to be living under the especial protection of some person in particular. Nor did this experienced individual stop here in his conjectures

respecting his juvenile patroness. If the solitary carriage, together with the many Roman memorials, in the purchase of which she indulged herself, convinced him that she *had* one particular "friend," the remarkable manner in which she haunted St. Peter's, the Pantheon, the Vatican, and so forth, evidently (after her first visit to each) preferring his absence to his presence, convinced him quite as firmly, that she either had, or intended to have, more than one.

It was then in front of the majestic portico of her favorite Pantheon, that the following dialogue took place, which will show clearly enough the sort of position in which the heiress of Sir Christopher Harrington had contrived to place herself, while strenuously endeavoring, with what she believed to be very praiseworthy resolution, to find consolation in her independence, for the desolate exile in which she seemed doomed to live.

Luigi Mondorlo had not been reading his "Ariosto" on the step of Miss Harrington's carriage for above half an hour on the fourth day that he had attended her to this admired edifice, when a young Englishman of rather distinguished manner and appearance came out of it, and having looked with somewhat of a scrutinizing glance at the equipage for a minute or two, addressed him in pretty good Italian to the following effect:

"I think I know your face, my good fellow. If I am not mistaken, you are just the sort of person I am looking after for a friend of mine. Are you likely to be long engaged with the lady you are attending upon now?"

Mondorlo looked up at him with the keen quick glance of an Italian eye, and more than half smiled as he replied, "How does the signor know that I am in attendance upon any lady at all?"

The young Englishman returned the glance and the smile too as he answered, "I believe you Italians think that no men have eyes but yourselves. But will you be pleased to answer my question?"

"Certainly," replied the man, rising, "to the best of my knowledge I will answer it. I intend to remain in my present situation as long as the lady requires my services. But how long that may be I do not know. When she dismisses me, it will be an honor to be employed by the signor."

"Very well then, you must give me your name and address," rejoined the Englishman, "that I may know how to get at you."

"Many thanks, signor. My name is Luigi Mondorlo, and I am always to be heard of at the English library in the Piazza di Spagna," said the man.

Mr. Lawry, for such was his name, drew forth his tablets and wrote the address.

"But how comes it, my good fellow," he resumed, "that such a clever, well-informed valet-de-place as you are, for I followed you and your party one day round the Vatican, how comes it, I say, that you should sit here amusing yourself with that queer-looking little book instead of attending the young lady round the Pantheon?"

The man laughed. "She has been here so often, signor, that she has heard all I have got to say about it, and would be as tired of hearing it all over again, I suppose, as I should be of saying it," he replied.

"What do you think makes her come here so often?" demanded Mr. Lawry.

"That is no business of mine," replied Luigi.

"Business? No, certainly. The answering such a question as mine has nothing very like business in it. But unless she pays you, and well too, for holding your tongue, she cannot reasonably expect that you should stand for hours together waiting upon her pleasure, without speaking a word to any one that passes by. But perhaps she *does* pay you well for keeping her secrets. Have I guessed rightly?"

"No, indeed, you have not, sir," replied the man, yawning. "She does not seem much to care who knows of her goings on. I never saw her pretend to make the least mystery or concealment about any thing she does, except just putting down her veil as she goes in and comes out of the places."

"Well, to be sure, that is strange enough," returned Mr. Lawry; "for of course, by your manner of speaking, you know that there are some things she does that she would not very well like every body to know."

"Why I have got no very good right to say so either," said the man, looking frankly up in the face of the questioner; "only, you know, that when a young lady is living in the way that of course she lives in, the gentlemen they depend upon would not, in the general way, quite like that she should keep loitering about as this one does, in all

the most quiet places. We don't want any conjuror to tell us how young ladies are amusing themselves when they do that."

"What is the name of the gentleman she lives with?" said Mr. Lawry.

"I know not, on my word," replied the conscientious valet. "And I do not know *her* name either. She pays me every week herself, and I bring her the receipt for the carriage and horses too, and the *buono mano* to the coachman she gives herself. But I never had any occasion to ask for her name, or for that of the gentleman either—and so I never did, for I don't love English names, they are so difficult."

"Then it is an English gentleman she lives with?" said Mr. Lawry.

"Why that I take to be a matter of course, sir, from the quantity of money she throws away in little bronzes and marbles, the miniature copies, you know, sir, of our great works. We never see that in any ladies that don't live under the protection of English gentlemen."

"And pray, my good Mr. Luigi Mondorlo," said the young Englishman, with sudden animation, "how do you know that she lives with any gentleman at all?"

The man laughed. "How do I know it?" he repeated. "You are a good many years younger than I am, signor, there is no doubt of that, and yet I should have thought you were old enough too to know that young ladies like my *padrona* do not wander about the churches, and galleries, and ruins, in the style she does, if they have any body to take care of them *except* the gentleman they live with, unless they are just married indeed, and don't choose to take any body about with them as yet. But that is not the case with my *padrona*, for the servants of the house always call her '*la signorina.*'"

"But how comes it that you have never asked these servants of the house any thing about her? If you had done this, you would not be driven to so much guess-work as you seem to be at present."

"Ecco!" exclaimed the man, laughing, "that is quite an English question, signor. The Roman people never think of making any inquiries of that sort. A gentleman may ask a lady a question, or a lady may ask a gentleman, for the private and particular satisfaction of either party, that is, provided they are not man and wife. But Rome would not be wide enough to contain its population if such sort of questions as you suggest were to be set going among them. We are a peaceable people, signor, in these latter days, whatever we might be formerly—peaceable in all ways, whether it be his Holiness or the Emperor that takes the government of the country upon him, or this noble gentleman, or that, takes the government of a lady, the wisest among the Romans look the other way, and say nothing."

"That may be all very wise and very convenient for you," replied the Englishman, condescendingly adopting the playful tone of the Italian, "but we manage all these matters very differently in our country."

"It may be so, signor," returned the valet-de-place, resuming his poetical studies. "But you will find if you stay long enough among us, that we understand all about the ladies, at least quite as well as you do; and that my pretty *padrona* is just the sort of young lady I take her to be, notwithstanding her looking as shy and as pale as a nun."

"I dare say you are right, my fine Roman," returned Lawry, chucking half a scudo at him, and the young Englishman walked off, without a doubt in poor Bertha's favor remaining on his mind, but not without something like a sigh that an English woman, and with such a pair of eyes too, should so early have placed herself beyond the reach even of a conjecture that might save her from condemnation.

THE WORLD SURVEYED IN THE NINETEENTH CENTURY.

From the Athenæum.

The World Surveyed in the XIXth Century; or, Recent Narratives of Scientific and Exploratory Expeditions, (undertaken chiefly by Command of Foreign Governments.) Translated and (where necessary) abridged by W. D. Cooley. Vol. I.—'Parrot's Journey to Ararat.' Longman & Co.

HARDLY a subject could have been selected more stirring in its character than "a journey to Ararat." Held in equal veneration by Jew, Christian and Mohammedan, and regarded with superstitious feelings even by the Pagan, that mountain has always enjoyed a degree of celebrity denied to every other. Sinai and Horeb and Ta-

bor may have excited holier musings; but Ararat "the mysterious,"—Ararat, which human foot had not trod after the restorer of our race, and which, in the popular opinion, no human foot would be permitted to tread till the consummation of all things,—Ararat the holy, which winged cherubim protected against the sacrilegious approach of mortals, and which patriarchs only were permitted to revisit,—appeared in many respects an object of curiosity as unique as it was exciting. In vain had traveller after traveller, from Marco Polo (if our memory do not mislead us) to Klaproth and Porter, looked and longed to know something certain concerning the holy summit. Its conical shape, its abrupt rises, protected by its everlasting ice and snow, seemed obstacles too formidable to be overcome by anybody, unless, indeed, by some Asiatic Green, who might hover about what he could not dare to touch.

This enthusiasm was shared by Dr. Friedrich Parrot, Professor of Natural Philosophy at the University of Dorpat, in Livonia. In 1811 he had accompanied Von Englehart in a tour through the Crimea and the Caucasus; and one day, while on the summit of the Kasbeg, he had descried, or fancied he had descried, through a sudden breach in the distant clouds, the snowy crown of Ararat. But at that time he feared to venture further. The domain on which the mountain stood, and, indeed, the whole of the intervening country, was in the power of the Persians, and perpetually infested by banditti. But the glimpse which he had then had of the spot had left behind it an impression which years only deepened. After the Peace of Turkmanshai, in 1828, between Persia and Russia, when the boundary of the latter empire had been removed from the Araxes to the southern slope of the mountain,—when "the Imperial eagle waved over Ararat,"—the longing returned with augmented force, and he determined to proceed at his own expense. But Alexander, before whom the project was laid, and who entirely approved it, advanced the money necessary for an Imperial astronomer, Vassili Federov, and ordered a field-jäger, or military guide, to accompany the expedition. Two medical students from the University volunteered their gratuitous aid towards extending the bounds of botanical knowledge, and were accepted; and there was also a mineralogist, Von Behaghel von Adlerskron, the friend of Parrot,—in all, six individuals. It is much to the Emperor's honor that, on their return, he defrayed the entire expenses of the expedition, and conferred on the intrepid leader the order of St. Anne.

It was in April, 1829, that the travellers left Dorpat. The season was rather late, considering that before they could reach their destination the scorching heat of the sun must have dried up the herbs which they were so anxious to collect. They reached New Cherkask on the 10th (22d) of May. The vast plain on both sides of the Manech, from that city to the Caspian, is inhabited chiefly by the Kalmuk Tartars, who cling to their ancient creed and their ancient modes of life with a pertinacity rather surprising, considering their frequent intercourse with civilized people. Respecting them our author has some particulars which are not generally known. It appears that no efforts can detach this singular people from their nomadic habits. "So great is their attachment," says Mr. Parrot, "to a roving life, that I was assured by one of their priests that it would be looked upon as a sort of violation of religious principle if they were even to attempt to provide a supply of hay in summer, to secure their horses and oxen from the danger of perishing of hunger in the winter; because it would seem an approximation to habits to which their natural practices are too obstinately opposed." To them fixed habitations would be intolerable. Their delight is in the Kibitka, or portable house, which in a single hour may be removed from the waggon and erected by a couple of men. It is always circular, with a diameter of about seventeen feet, and a place in the centre for the fire, the smoke of which escapes through a round hole in the roof. Their diet is sour or fermented milk, sour butter, and animal food, especially mutton; corn, herbs, vegetables and fruits would require cultivation, and consequently a fixed residence. For the first of these articles, and for cloth, salt, &c. they do sometimes exchange with the Russians; and though they are always cheated in the bargain, they will not turn their attention to the production of such things. Industry in every shape they detest. To drive their cattle and flocks of sheep from winter to summer pastures, and *vice versâ*, is exercise enough for them. In religion they are said by our author to be Buddhists; but this is impossible; their food, their habits prove that it is. All that can be meant is, that they were probably derived from the same stock

as the modern votaries of that creed in India, and, consequently, that they hold some of the same tenets. They have others divergent enough from the genius of Buddhism. Thus, one of their gods, Sengir, they hold to be as high as any of the Buddhas; and they assign him both an origin and attributes entirely incompatible with the creed. The truth is, that they have engrafted on their ancient religion some tenets, of which it would be difficult to say whether they have more affinity to Christianity or to the paganism around them. They have a ritual of their own, or a language so ancient as to be wholly unintelligible to the people,—perhaps also to the priests, who are very few in number. Their sacred books are said to have been derived from Mongolia or Thibet; but more probably, we think, from the north of Hindostan, or from the intervening region between it and Media. It is much to be wished that a copy of these sacred books were taken and brought to England,—that some modern Anquetil du Perron would arise to do what learned societies, with all their wealth and influence, will not even attempt, viz.—to extend the bounds of our knowledge alike of ancient languages and creeds. We have long entertained an opinion that the discovery of two or three more links in the chain would render that knowledge so far complete as to place within our reach the mysterious inscriptions which, in Persia, at Babylon, and in other places, so provokingly baffle our curiosity. The language of the sacred books in question probably bears some affinity with one or other of those remarkable tongues, the Zend and the Pehlivi. But, alas! until more attention is paid to the sacred language of Buddha, the connecting link between the Sanscrit and the ancient languages of Persia and Media, we can hope for no farther progress in this most interesting and most important department of knowledge; — interesting both in itself and in its relations with kindred subjects, and important from the light it must necessarily throw on ancient history.

Returning to the religion of the Kalmuks, we may perceive that some of their tenets, like those of the Indian Buddhists, are essentially atheistical. The material world, according to them, has proceeded, not from an Almighty Creator, but from an incomprehensible abstraction, *space without bounds*,—a kindred principle, be it observed, with that of the ancient Medes, from which Ormuzd, and Ahriman, and a portion of the higher universe directly emanated, viz. *time without bounds*. The only deity worthy of mention is the Buddha for the time being; and for this dignity he is indebted to no extrinsic influence, to no supernatural power, but to his own efforts, his own virtue. But it is evident that this people are immeasurably inferior to their Indian brethren in the knowledge and practice of religious dogmas: they have yet to learn, or they have forgotten, the elementary principles. Nor can this surprise us. They receive no instruction;—they have, indeed, nobody to instruct them, since their priests are so few and so ignorant; and their temples (each merely a large kibitka) are too small to accommodate a tithe of the number that might attend on great festival occasions. The following is Mr. Parrot's description of one:—

"Here, hang a number of distorted representations of their divinities on the walls; there, is reverentially preserved a brazen idol, cast for their principal god, who is generally represented as a female, like many others among them, and often with four or six arms, and similar hideous deformities of shape. In another place lie piled in chests their sacred writings, obtained from Mongolia or Thibet, and which are intelligible or rather legible, to none but the initiated; that is to say, their high priest or lama, and the officiating minister or gellong. Their religious service, too, judging from what I had an opportunity of observing, is in no respect more elevating. The priests seat themselves in the kibitka, with their legs bent under them, and the soles of their feet turned upwards, or, as the Mongolians express it, in sceptre-fashion, so as to be ranged in two lines opposite to each other from the entrance. In this posture they remain, as immovable as statues, and chant or sing their prayers on a sort of rosary, interrupted from time to time by the harsh discordant tones of a peculiar kind of brazen cornets, accompanied with the clang of kettle-drums and cymbals, and the deep but clear bass notes of two straight wooden trumpets, six feet long; which latter, however, I only saw introduced in the elegant stone church built at Astrakhan, by the Kalmuk chief whom I have already mentioned. As for the laity of even the same khatun only taking a part in the daily worship of their gods, they are effectually precluded from that, by the smallness of the kibitka in which it is performed; much less can the inmates of those khatuns which are six or twelve miles distant, catch the sound even of the music. They content themselves with the assurance that the lamas and gellongs are offering up their prayers enjoined by their ritual for the welfare of the Kalmuk community. As the constitution of their church teaches no distinction between Sundays and weekdays, their prayers are limit-

ed to a short formula, which they repeat as a sort of charm or spell upon every important occurrence, and without any very clear conception of its import."

When our author reached Tiflis, he learned that the plague had broken out in Erivan and the neighboring villages directly in the route to Ararat, and had proved very destructive. To wait until its fury should subside was his most prudent course; and accordingly during more than two months he was able to make some useful observations on the weather, and on the habits of the people. The heat was sometimes oppressive in July and August,—the thermometer frequently exceeding 90° of Fahr.,—not at noon-day merely, but at midnight. The sultry nights indeed are the worst enemies a stranger has to encounter. During the same delay, Mr. Parrot made an excursion into the neighboring province of Kakheti, under a military escort. He found the inhabitants, like most of the Georgians, too much addicted to wine: a Georgian, it is said, of the right Trojan sort, has no great difficulty in despatching as much strong wine as would fill ten of our bottles. It is somewhat singular that the agriculturists use a plough very similar in construction to that adopted by the French peasantry from Lyons to the Mediterranean. In other respects this most necessary of arts is in a low state. As the traveller proceeds in their mountainous regions, he may from time to time discern the robber fastnesses, made to accommodate sometimes not merely scores, but hundreds. From their inaccessible position (inaccessible to considerable bodies of men), and from the want of heavy artillery, they are never seriously assailed. Nor while in them can the robbers do any mischief,—the region around presenting no harvest for the exercise of their profession. They serve merely as places of refuge when hotly pursued, and as more permanent abodes in the wet and wintry season.

Mr. Parrot took his departure from Tiflis on the 1st of September. At one part of the valley of the Araxes, while encamped some twenty-four miles from Echmiadzin, on the plains where the Greeks and the Sassanides so often contended for empire, and where in more recent times the Crescent and the Cross have so often struggled for the possession of Erivan, and within sight of the Holy Mountain, our traveller can no longer restrain his enthusiasm, or at least those solemn musings suitable to the scene and the recollections which it inspired. Echmiadzin contains riches always tempting to the cupidity of the Persian rulers. But these rulers have not acted so blindly as the Turks would have done. Satisfied, from time to time, with exacting heavy contributions from the resident patriarch, archbishops, and archimandrites, they have, generally, left untouched the treasures connected with the service of the altar. In other respects, they have shown great policy. Thus they have connived at the breeding of hogs within the holy precincts (the monastery, gardens, cathedral, outbuildings, &c. are surrounded by a high wall, a mile and a half in circumference), and the monks, on their part, have been careful not to offend Mohammedan bigotry, by allowing the animals to appear outside the enclosure. But in their conformity to the wishes of their masters, these holy men went much further—so far, when absent from the monastery, as to assume the very garb of the Turks or Persians, and to be mistaken for them. They have, indeed, learned the wisdom of the serpent. There is now no longer a necessity for such precautions in the immediate vicinity of Echmiadzin—the Russians being the lords of the ascendant; but frequent journeys being necessary to the churches of that communion in every part of Asia Minor, and even to Constantinople, the disguise is still adopted beyond the confines of the Russian and Persian empires. In Persia itself, no such disguise is necessary. Their churches, and processions of the clergy in full costume, are openly tolerated. The Persian commander-in-chief, at the time of Mr. Parrot's arrival in Armenia, Hussein Khan, encouraged the sustentation of the churches, which he sometimes attended himself with every appearance of devotion. Nor was he alone in such political acts of respect to the Christian worship. Even the terrible Shah Abbas hung a costly lamp in the Cathedral of Echmiadzin, and there it is at the present day. Shah Sada too was never known to enter a Christian church without leaving his slippers at the door, and having a rich carpet spread for him, just as if he were present in the mosque. And we all know with what readiness the late Futteh Ali, at the request of Sir Gore Ouseley, published his famous edict in favor of a version of the New Testament into the vernacular tongue of his people. These acts of liberality, whatever the motive, contrast nobly with

the wretched bigotry of the Turks. By many authors (and Mr. Parrot among the number,) who follow Tavernier, such liberality is ascribed to something superior in the sectaries of Omar, over those of Ali. But the comparison is not just; for the Moors of Africa, who are of the same sect as the Persians, are a hundred times more intolerant towards the Christians than the Turks themselves.

Our author entered the walls of Echmiadzin on the evening of September the 8th, and proceeded with his letter of introduction to the Archimandrite Joseph, by whom he, and his companions, were hospitably received, and for some days entertained. And it is but justice to observe, that the other ecclesiastics were equally ready to make his abode comfortable. He had, therefore, sufficient time to admire the extent of the enclosure, and its accommodations. The ecclesiastics, all but a few aged archbishops, and the patriarch himself, take their meals, which are said to be frugal, in the grand refectory together. There is a market in one part, attended by the inhabitants of the neighboring village of Vagarshabad—not so much for food, as for the manufactures proper to the establishment. Workmen, too, from the same village, are often busily employed during the day; but they do not sleep within the precincts. In the centre of the enclosure is the grand church, or metropolitan see of the Armenians. Its architecture is poor enough; but it is massive, large, and rich, especially in relics, which, like Sir John Chardin and Tournefort, our author is at some pains to describe. The patriarch, whose name was Ephrem, signified the pleasure which he should have in receiving a visit from the strangers; and the day following their arrival, they repaired to his abode. They were shown into a dreary upper room, having no furniture but two rows of seats opposite to each other. There sat the Catholikos himself, with the archbishops and archimandrites below him, to the right and left. He was ninety-three years of age, had travelled much—as far even as India, and had obtained no little reputation. But learning is at a low ebb among these monks. With three exceptions, they understand no language of Europe. These exceptions were, the librarian, the Archimandrite Manuel, and the young deacon Abovian, destined to ascend Ararat with our author; and even their acquirements extended only to some knowledge of the Russian language. Of the ancient languages, not one in the community had the slightest knowledge; but, doubtless, they must have had some acquaintance with the Persian and Turkish. Nor did the fraternity take any interest in the education of the young. There was a school-room indeed, but neither teacher nor pupil; just as there was a library which few entered. Yet they have some ancient MSS. of great historical value. The origin of the nation is carried back to Haigh, an immediate descendant of Japhet, who, at the confusion of tongues, journeyed into these regions, and became the founder of the monarchy; while his four brothers were the progenitors of the Georgian and Caucasian tribes.

On the morning of September 10th (22d) Mr. Parrot and his companions bade adieu to the patriarch, the twelve bishops and archbishops, the forty archimandrites and host of deacons, and set forward towards the foot of Ararat. The party was increased by three or four temporary attendants, the most valuable of whom was the young deacon, Khachatar Abovian, whose knowledge of the Armenian, Persian, Tartar and Russian languages rendered him a valuable—indeed, an indispensable acquisition. He had earnestly besought permission to accompany them, and no wonder: he wanted a frolic, and especially to escape from the solemn greybeards, whose sunken eyes would twinkle and empty heads shake at every appearance of natural hilarity. He was to introduce the party to the other Armenian establishments on the route or in the neighborhood of the mountain, and to serve them whenever he could. In every respect he won the esteem of those whom he conducted.

In about six hours the travellers reached the Araxes, which they crossed with some difficulty; and the same evening saw them safely over the Blackwater (Kara-su), where they encamped. The following morning they resumed the journey, but there was no longer either pathway or level plain; the inequalities of the ground showed that they were treading the base of the gigantic mountain. It was soon evident, indeed, that the frequent interpositions of rock would render it impassable for the wagons. They were accordingly dismissed, and the baggage was conveyed on the backs of oxen to the village of Arguri.

But Arguri was afflicted with the plague, and would not therefore serve for the headquarters of the party. Fortunately for them, there was a small monastery or hermitage

higher up the declivity, which had no intercourse with the world below, and was in consequence free from the scourge. Entering the court-yard of this establishment, they were met and welcomed by the venerable superior, Varthabed Karapet, archimandrite of St. James, whose austerities forcibly remind us of the solitary inmates of the Great Chartreuse. He was clad "in a warm gown of blue serge, with a pair of common slippers, and woollen Persian socks." "His head was gray, exempt from the obligation of tonsure since the downfall of the Persian monarchy, and covered with the pointed Capuchin cowl of blue Indian stuff; his beard was long; his eyes, deeply set and large, spake only of chastened longings after a better world." His voice was weak and hollow; he never smiled; but there was a benevolence and even cheerfulness in his countenance indicative of the peace within. For years he had been in the habit of working at his own grave, or rather vault, with trowel, mortar and stone, and the occupation evidently gave him the only real pleasure he was capable of feeling. We have called him the superior, but he had no monks; he was accompanied only by two male servants to look after his sheep, goats, vegetables, &c.—the former being probably no part of his diet, but useful to exchange for articles of which he had more need. In such an establishment the accommodation for seventeen (for to that number the party was augmented by Cossacks and soldiers from Tiflis, and attendants from the monastery) was not likely to be very agreeable. Provisions they had to find for themselves wherever they could; but at Arguri and the more distant villages money rendered this no difficult task. A long chamber adjoining the cell of the archimandrite served for kitchen and parlor,—a sort of granary being given up to them for a bed-room.

On the morning of September 12th (24th) Mr. Parrot and three companions left the hermitage of St. James to ascend the mountain, with the view rather of reconnoitring than with any serious hope of reaching the summit. Passing through a deep ravine, and ascending the grassy declivity behind, they began to tread the rugged, often rocky sides of the mountain; but so fatiguing was their progress, owing partly to the excessive heat in the early part of the ascent, that it was 6 o'clock, P. M., before they had approached even near the lower, or occasional border of snow and ice. Here it was cold enough, and here they encamped for the night. At break of day they continued their course up the slope on the eastern side of the mountain, which, though apparently smooth from a distance, is intersected by sharp rugged rocks, with deep cavities between them full of ice or snow. The first glacier was passed with great difficulty and fatigue—so much so, that one of the attendants could go no farther, and another had previously turned back from a similar cause. There remained, therefore, only Mr. Parrot and Mr. Schiemann (who had left Dorpat with him), but they were not disposed to give way. Passing the second glacier and the third ridge, they found themselves on the border of the permanent ice, which continued without intermission to the very summit; and this point they estimated at 13,954 feet in elevation. Whatever might have been their difficulties previously, they were small compared with those which remained. Though the angle of the ascent did not exceed thirty degrees, yet the inequalities were frequent, and the foot could scarcely plant itself securely on any part of the ice. Instead of following a direct, they adopted an oblique line of ascent, till they gained a long craggy ridge stretching upwards towards the summit. This they were chiefly enabled to do by the aid of the iron-pointed staffs, with which they both made holes in the ice and steadied themselves when on the point of losing their footing. By the time they had begun to proceed upwards on this ridge it was 3 o'clock, P. M.; and though they were 15,400 feet above the level of the sea—that is, about the same elevation as Mont Blanc,—the snowy peak of the greater Ararat was far above them. To reach it that night, even if no insuperable obstacle should intervene, was hopeless; to remain there all night, without attendants or necessary supplies, was equally impossible. Accordingly, they resolved to descend; but the task was less easy than they had thought:—

"Satisfied with the result, and with having ascertained that the mountain was by no means wholly inaccessible on this side, and having made our barometrical observations, we turned about and immediately fell into a danger which we never dreamt of in ascending. For, while the footing is generally less sure in descending a mountain than in ascending it, at the same time it is extremely difficult to restrain one's self and to tread with the requisite caution, when looking from above upon such a uniform survey of ice and snow, as spread from beneath our feet to the distance of two-thirds of a mile

without interruption, and on which, if we happened to slip and fall, there was nothing to prevent our rapidly shooting downwards, except the angular fragments of rock which bounded the region of ice. The danger here lies more in want of habit than in real difficulty. The active spirit of my young friend, now engaged in his first mountain journey, and whose strength and courage were able to cope with harder trials, was yet unable to withstand this: treading incautiously, he fell; but as he was about twenty paces behind me, I had time to strike my staff before me in the ice as deep as it would go, to plant my foot firmly on my excellent many-pointed ice-shoe, and, while my right hand grasped the staff, to catch M. Schiemann with my left, as he was sliding by. My position was good, and resisted the impetus of his fall; but the tie of the ice-shoe, although so strong that it appeared to be of a piece with the sole, gave way with the strain; the straps were cut through as if with a knife, and, unable to support the double weight on the bare sole, I also fell. M. Schiemann, rolling against two stones, came to a stoppage with little injury, sooner than myself; the distance over which I was hurried almost unconsciously, was little short of a mile, and ended in the debris of lava, not far from the border of the glacier."

In this disaster the tube of the barometer was broken, and the chronometer was opened and sprinkled with Mr. Parrot's blood. But though bruised and sore, he was not seriously hurt. Both descended, joined their attendant yäger, who had been waiting for them, passed the second night "in the region of grass," and reached the hermitage of St. James at 10 o'clock the third morning. They took especial care not to acquaint the Armenians with their fall. With that people it is an article of faith, that the ark yet remains on the summit; that to preserve it the ascent is divinely forbidden: and that the man who perseveres in the attempt is sure to meet with the penalty due to his impious rashness. There is, to be sure, a small piece of the said holy vessel, which is religiously preserved in the monastery of Echmiadzin. How came it there? Of course by a miracle. Early in the fourth century, or somewhere about that time), a monk named Jacob (afterwards patriarch of Nisibis) was determined to see whether Noah's ark was there or not, even if the ascent should take him a whole year. There was no great difficulty, by easy stages, in reaching the line of perpetual coagulation; but much above that he could not permanently ascend. Though he sometimes attained a great elevation, he always found that during his sleep he had slided downwards to the borders of the ice, and his labor was to be recommenced. This was discouraging enough; but he persevered, until he was one night told in a dream that his labor would be in vain; that he must therefore desist; but that as his motive was good (to satisfy unbelievers), a piece of the real vessel was sent him, which would answer the purpose just as well. Hence the peculiar sanctity of the relic in the Cathedral of Echmiadzin.

Though this first attempt had been so disastrous, and had been near proving so fatal, it was not likely to deter a man who had come all the way from Dorpat from making another. Having recruited himself by rest, and repaired his barometer to his satisfaction, he resolved to make a new and public display of his zeal. He had a cross made some ten feet high, and a leaden plate, with an inscription to indicate the altitude which the demons of the mountain might permit him to reach. To render the enterprise more likely to succeed, the cross was prayed to, anointed with oil, and blessed by the archimandrite according to the Armenian ritual. Beasts of burden were provided, to ascend as far as they could with the necessary instruments, warm clothing, provisions, &c. On the morning of September 18th (30th) the party set forward, consisting of Mr. Parrot, Von Bahaghel, Schiemann, the deacon Abovian, four Armenian peasants from Arguri, three Russian soldiers, and a driver for the four oxen—in all a dozen, which was raised to the baker's count by the accession of Stepan Melik, an elder of Arguri, who was an excellent guide. In conformity with this man's advice, the ascent was this time attempted on the northwest side of the mountain, where the way, though longer, is generally less precipitous. Passing over the grassy region, they came to the sandy and the volcanic, next the rocky, and then very unexpectedly, a plain; where, after five hours' labor, they were glad to rest. From this plain, which is nearly twelve thousand feet above the level of the sea, the declivity is steep, and generally rugged until the rocky stage is passed, and the icy region commences. At 6 P. M. they had reached an elevation of above 13,000 feet, and were not far from the border of that region. With great difficulty, and by constantly following an oblique direction, the oxen had been brought up to this point; but to drive them higher was hopeless, and they were turned loose. Here the night was passed. At half-past 7 the following morning, the bipeds resumed the journey,

the thermometer standing four degrees below the freezing point, and in two hours, after great toil, they reached the snowy limits, 14,240 feet above the level of the sea :—

"For an instant we halted at the foot of the pyramid of snow which before our eyes was projected with wondrous grandeur on the clear blue sky: we chose out such matters as could be dispensed with, and left them behind a rock: then serious and in silence, and not without a devout shuddering, we set foot upon that region which certainly since Noah's time no human being had ever trodden. At first the progress was easy, because the acclivity was not very steep, and besides it was covered with a layer of fresh snow on which it was easy to walk; the few cracks in the ice, also, which occurred, were of no great breadth, and could be easily stepped over. But this joy did not last long; for, after we had advanced about 200 paces the steepness increased to such a degree, that we were no longer able to tread securely on the snow, but in order to save ourselves from sliding down on the ice beneath it, we were obliged to have recourse to that measure, for the employment of which I had taken care to equip myself and my companions, namely, the cutting of steps. Although that which is called ice on such mountains, is in reality snow converted into a glacier, that is to say, permeated with water and again frozen, in which state it is far from possessing the solidity of true ice, yet like this it does not yield to the pressure of the foot, and requires, where the slope is very rapid, the cutting of steps. For this purpose some of us had brought little axes, some bill-hooks, while others again, made use of the ice-staff. The general rule in the ascent was, that the leader should only cut the ice, just enough to allow himself to mount, and that each as he followed should enlarge the step; and thus while the labor of the foremost was lightened, a good path was prepared for the descent, wherein much firmer footing is required than in ascending."

In this painful progress, the carrying of the cross was no little hindrance. And there were other obstacles. Craggy projections of ice had to be turned, and deep chasms passed over; and in surmounting these impediments so much time was lost, that there remained not enough of daylight for their purposes when they had reached a small snowy plain considerably under the summit. Besides, a humid wind arose and was supposed to indicate a snow-storm. Here, then, at an elevation of above 16,000 feet—the highest that had ever been attained by any traveller—they agreed to erect the cross and to descend. It was placed in a position looking towards Erivan; and from its black painted color contrasting with the snows around it, must, the author thought, be visible from a considerable distance. He was greatly pained, he tells us, at the necessity for such a descent; but there was no remedy; and he was consoled by the latent hope that he should still accomplish his object. The party now began the descent; at dusk they reached the plain where the oxen had been left, and where they passed the night; and at ten the following morning, they re-entered the walls of the hermitage.

Hitherto, we have followed our author without distrust. His narrative everywhere bears the impress of probability and of truth, and has been supported by the evidence of his companions. But in the reality of what follows, there will, if we mistake not, be less confidence—we mean as to the alleged fact of his having actually reached the summit of Great Ararat. Let us first hear his own statement, before we pass any strictures upon it.

In a few days afterwards, so little prospect was there of attaining the great object of the expedition, that two of the gentlemen from Dorpat set forth on a botanizing visit into the neighboring country. While they were absent, late as the season was, the sky cleared up, the wind fell, and the air became pure; and Mr. Parrot proceeded a third time to prepare for the ascent. Being furnished with three oxen and four peasants by Stepan of Arguri, he left the hermitage October 8, accompanied, also, by the deacon Abovian, two soldiers, one gentleman from Dorpat, and another peasant who volunteered his services. Past experience had taught him the advantage of spending the night as near as possible to the line of perpetual ice. Having reached the rocky region, he sent back both the horses which he and the deacon rode, and with them returned the Dorpat gentleman (Hehn), who we are given to understand by implication, had no relish for the fatiguing exercise that lay before them. When the oxen, also, could ascend no higher, they were left as before—each man carrying with him what seemed indispensable. At half-past 5 they had approached very near to "the lower border of snow," at an elevation of nearly 14,000 feet; and there, as large masses of rock lay scattered about, they passed the night. Having kindled a fire, though the cold was not near so great as on the former occasion—(only 40° of Fah.) they passed it in comfort, and even cheerfulness. This effect was partly produced by

the onion soup which the professor strongly recommends to every mountain traveller. The warmth, the clear sky, the good humor of every one seemed like a prognostic of the following day's triumph:

"At the first dawn we roused ourselves up, and at about half-past six proceeded on our march. The last tracts of rocky fragments were crossed in about half an hour, and we once more trod on the limits of perpetual snow, nearly in the same place as before, having first lightened ourselves by depositing near some heaps of stones such articles as we could dispense with. But the snowy region had undergone a great, and for us by no means favorable change. The newly fallen snow which had been of some use to us in our former attempt, had since melted, from the increased heat of the weather, and was now changed into glacier ice, so that notwithstanding the moderate steepness of the acclivity, it would be necessary to cut steps from below. This made our progress a laborious affair, and demanded the full exertion of our strength from the first starting. We were obliged to leave one of the peasants behind at the place where we spent the night, as he complained of illness; two others tired in ascending the glacier, stopped at first only to rest, but afterwards went back to the same station. The rest of us, without allowing ourselves to be detained an instant by these accidents, pushed on unremittingly to our object, rather excited than discouraged by the difficulties in our way. We soon after came again to the great crack which marks the upper edge of the icy slope just ascended, and about ten o'clock we found ourselves exactly in the place where we had arrived on the former occasion at noon, that is to say on the great plain of snow, which forms the first step downward from the icy head of Ararat. We saw from a distance of about half a mile the cross erected on the 19th September, but it looked so uncommonly small, perhaps owing to its black color, that I could not help doubting whether I should be able to make it out, and to recognize it with an ordinary telescope from the plain of the Araxes. In the direction of the summit we had before us an acclivity shorter but steeper than that just passed over; and between it and the furthest pinnacle there seemed to intervene only a gentle swelling of the ground. After a short rest, we ascended with the aid of hewn steps the next slope (the steepest of all), and then another elevation; but now, instead of seeing immediately in front of us the grand object of all our exertions, a whole row of hills had developed itself to our eyes, and completely intercepted the view of the summit. At this our spirits, which had never fluctuated so long as we supposed that we had a view of all the difficulties to be surmounted sank not a little, and our strength, exhausted by the hard work of cutting steps in the ice, seemed hardly adequate to the attainment of the now invisible goal. Yet, on calculating what was already done and what remained to be done, on considering the proximity of the succeeding row of heights, and casting a glance at my hearty followers, care fled, and, 'boldly onwards!' resounded in my bosom. We passed without stopping over a couple of hills; there we felt the mountain wind; I pressed forward round a projecting mound of snow, and behold! before my eyes, now intoxicated with joy, lay the extreme cone, the highest pinnacle of Ararat. Still, a last effort was required of us to ascend a tract of ice by means of steps, and that accomplished, about a quarter past three on the 27th September (9th Oct.), 1829, WE STOOD ON THE TOP OF ARARAT.

Here, if the truth be told, was triumph indeed, and well-earned; and, for a time, all other feelings might well be absorbed in it. When the travellers had rested themselves a little, and had leisure to look about them, they found the summit, in shape nearly cruciform, about two hundred paces in circuit, and sloping precipitately on every side, particularly towards the south-east and north-east. There was no rock, no stone, nothing but eternal ice.

"Should any one now inquire respecting the possibility of remains of the Ark still existing on Ararat, it may be replied that there is nothing in that possibility incompatible with the laws of nature, if it only be assumed that immediately after the flood the summit of that mountain began to be covered with perpetual ice and snow, an assumption which cannot be reasonably objected to. And when it is considered that on great mountains accumulated coverings of ice and snow exceeding 100 feet in thickness are by no means unusual, it is obvious that on the top of Ararat there may be easily a sufficient depth of ice to cover the Ark, which was only thirty ells high."

The view, we are further told, was not so extensive as it might have been, owing to a vapory cloud which covered the valley of the Araxes. Through it, like dark spots no bigger than the human head, appeared Erivan and Sardarabad. Southwards, the hills beyond Bayazed were more distinctly visible. To the north-west the serrated head of Aleghes rose in majesty, its hollows being filled with snow. On the summit, proceeds the author, the mercury in the thermometer stood at nearly seven degrees below the freezing point. By the barometer the height above the hermitage of St. James was estimated at 10,876 feet, or 17,210 feet above the level of the sea. This elevation is only 200 feet different from the trigonometrical measurement of Mr. Fedorov, taken from the plain of

Araxes, in the first half of October. Having remained on the summit about three quarters of an hour, and erected a cross, the adventurous party (six in number) began the toilsome and dangerous descent, and the sun had sunk below the horizon before they reached the spot where they had bivouacked the preceding night. There they spent the next, with another cheerful fire, and still more cheerful hearts, and about noon the following day entered the walls of St. James.

Such is Mr. Parrot's narrative in a condensed form. Of its truth we entertained no doubt during the composition of the first notice; but as, with pen in hand, we followed him step by step, in his third ascent, and took into consideration other circumstances to which little or no allusion has yet been made, the suspicion arose that much of what we were reading was pure invention, and every new examination has given force to the impression. Though the task is in no respect agreeable, we are bound to state the reasons of our scepticism; and our readers may approve or reject them at their own pleasure.

From the pointed and rugged forms of the icy peak of Great Ararat, preceding travellers had declared the ascent to be impossible. When, therefore, news of the actual ascent was spread through central Europe, one scientific and literary writer at the least had the boldness to deny it. Alarmed for his reputation, Mr. Parrot obtained, through the medium of the Russian government, affidavits from four out of the five persons who, according to his relation, had ascended and descended with him. As these affidavits were taken within two years after the alleged event, there was not enough of intervening time to impair the memory in regard to any of the circumstances. These five persons were the deacon Abovian, Alexei Sdrovenko, and Matvei Chalpanof, soldiers of the forty-first Yäger regiment serving in Armenia, Murat Pogossian, and Ovannes Aivassian, Armenian inhabitants of the village of Arguri. From their testimony,—the very testimony adduced for the ascent to the summit—we expect to show that it did not take effect. We do not say that it could not—for we dismiss altogether the alleged physical impossibility.

Of these witnesses, the two soldiers were examined on oath Nov. 2, 1831, by the high priest, Vassili Romanof, in presence of five officers of the regiment, assembled (apparently) at Tiflis or Erivan. In answer to the questions put by him, both swore unhesitatingly that in September, 1829, they had accompanied Mr. Parrot to the very summit of Ararat; that they had fixed a wooden cross on the summit firmly in the ice; and that the ascent and descent had occupied three days. When asked what reward they had received from the professor, they replied, *a ducat* in the hermitage of St. James; but that on their return to Erivan they had each received ten silver rubles from their commanding officer.

This positive evidence would of course settle the dispute, were it not counterbalanced by that of the two Armenians of Arguri. They, too, were examined on oath October 15th, 1831, by the Armenian priest Ter Sakar, in presence of the Russian superintendent of police of Erivan. Both deposed to the other circumstances as related by the Professor; but both denied that they had ever reached the summit of the mountain. "We were not on the summit, and could not get there, because further on there is no snow lying, but only ice; and besides the steepness of the slope allows no farther progress." For their reward they had each a silver ruble.

At the same time, or rather three days before, (Oct. 12th, 1831) Stepan Melik (called in the depositions Melik Stepan Aga), the chief of Arguri, was examined on oath by another priest, in presence of the same superintendent of police, Erivan. As he did not accompany the Professor in the third ascent, his evidence is only hearsay; but still it is worth something. Murat Pogossian and Ovannes Aivassian had always said that on this (third) occasion they had not ascended higher than on the second, and that the second cross, though fixed in a different place, was not higher up the mountain. But it may not be amiss to transcribe the opinion of this shrewd local chief as to the possibility of reaching the top of the mountain:—

"As to the ascending the highest summit of Ararat, that is quite impossible, partly on account of the terrible cold, which makes it difficult even to draw one's breath, even where the cross was erected, but chiefly because the mountains, rising beyond the place of the cross, fill one with terror at the first view of their steepness, and no longer covered with snow but all of ice, they rise like great walls; and even, in order to succeed in reaching the place where the cross is erected, it is necessary that the ice on the mountain should be covered with snow. With respect to the length

of time which would be required to reach the summit (supposing this to be possible), it is the more difficult to estimate it, inasmuch as no one ever reached before even the point where the cross is erected; and in climbing the mountain to the place here indicated, I and the villagers were often obliged to haul up M. Parrot and his companions with ropes."

Mr. Parrot, of course, denies this employment of the ropes; but he cannot be a witness in his own cause.

At the first glance, the evidence appears to be so completely balanced,—two *for* and two *against*—that the question would be left merely doubtful. But there are other considerations capable, we think, of turning the balance in favor of the Armenian witnesses. 1. If they had really ascended to the summit, they would surely not have concealed a feat so flattering to their vanity, and least of all from their village chief, with whom they were in daily intercourse. 2. They must have known that their testimony to Mr. Parrot's success could not fail to be agreeable to the Russian authorities, and they were consequently disposed to confirm his statements as far as they could. 3. The same consideration, viz., the wish of gratifying their superiors, might have led the two Russian soldiers to stretch their consciences for that purpose, no less than for the honor claimed by their country of having first succeeded in so hazardous and difficult an enterprise. 4. Why did each of them receive ten silver rubles on their return to Erivan, when their pay as soldiers must have been accumulating all the time of their absence? The local authorities of Russia are not wont to be thus liberal towards the lowest of their subordinates. 5. Chalpanof, who is made the mouthpiece of the replies given in the examination, had actually ascended with the professor and others to the top of *Little* Ararat, a few days after the alleged ascent to the summit of the *Great* Ararat. Did he observe the *letter* and disregard the *spirit* of his oath? 6. The documents to which we refer come to us through Russian hands, and are translated by Mr. Parrot himself.

If a consideration of these circumstances should incline the balance in favor of the native Armenians' evidence, two others, may be adduced of at least equal weight in support of the same view. 1. None of the Europeans—not even the feld-yäger, who had left Dorpat with the Professor—were present at this third ascent. Von Behaghel and Schiemann were gone on "an interesting excursion to the salt mines of Kulpe, up the Araxes, sixty miles from Ararat." Fedorov, we suppose, was occupied in the plains below on his trigonometrical labors, though we are informed that he carried them on "during the first half of October;" at least, if he were not there, we know not where he was. Hehn, as we have already observed, left the party very early on the first day of the third ascent,—why, is best known to the parties concerned. As to the feld-yäger, we are not told where he was. That *all* these should be absent seems passing strange:—nobody retained but ignorant Armenians and Russian soldiers, who were not likely to hear a syllable, during the rest of their lives, of literary disputes in Europe. 2. But no! all the Armenians present were not ignorant. Was not the deacon Abovian there? Then why was not his testimony also brought forward? Why is not a word said about him or it? His abode, the monastery of Echmiadzin, was nearer to either Tiflis or Erivan than the village of Arguri, and much more accessible. Was he applied to, and his testimony suppressed? Or was he not applied to? In either case, the exclusion of so important a witness would (at least, in our opinion) alone be fatal to Mr. Parrot's pretension. We may, indeed, be told that "dark superstition" would prevent the community of Echmiadzin from allowing the young deacon to be examined,—just as it did prevent (so the Professor insinuates) the villagers of Arguri from telling the truth. The superstition is too ridiculous to deserve a thought. If even this superstition existed to such an extent as to occasion deliberate perjury, it would not, we may safely conclude, have been able to withstand Russian influence. Had the truth been presumed favorable to the claim of the Dorpat professor, it would have been forced from the young deacon, though the whole monastery, and the whole Armenian church, had encouraged him to conceal or pervert it.

From these united considerations, we are irresistibly led to the conclusion that Dr. Parrot did not ascend the summit of Great Ararat. We care not for the eulogium passed upon him by Von Humboldt, who had probably no personal acquaintance with him. Even if it did not exclusively relate (as it most certainly does) to the Professor's candor in owning himself wrong in his former barometrical levellings

(executed in 1811) between the Euxine and the Caspian (there is little candor in acknowledging what, as he well foresaw, scientific experiments would soon determine to be erroneous, and erroneous in fact they have been determined), what would it weigh against positive facts, and presumptions so strong as almost to deserve the name of facts? On this subject we shall not add another word.

We cannot dismiss this celebrated mountain without adverting for a moment to the earthquake which, in 1840, so much affected it, and so dreadfully scourged the neighboring country. It broke out on the 20th of June, about a quarter before seven in the evening, and in the immediate vicinity of the mountain lasted only two or three minutes; farther off it was felt until seven, with more or less violence. At the very commencement the hermitage of St. James and the village of Arguri, with its thousand inhabitants, were buried forever beneath the river of lava, mud, rocks, snow, and ice precipitated from the bowels of the mountain, from the higher declivity, or from the chasm which lay high up the slope. The banks of the Araxes gaped with hideous cracks, ten or twelve feet wide, parallel with the river, and threw out water and sand. In the neighborhood of Sharur, three thousand houses were cast down; in Erivan and the neighboring villages above six thousand shared the same fate, and thousands more in different directions, though the loss of life was fortunately insignificant. On the summit itself immense quantities of snow and ice were gradually loosened, and on the morning of the 24th, at nine o'clock, it moved downwards, carrying rocks, precipices, mud, &c., along in one vast stream, from eighty to a hundred feet deep, and miles in width, and exhausted itself in the valley of the Araxes. The most striking result of this volcanic action is, that the icy summit of Great Ararat is sunk considerably, though it has not fallen in, as was reported at the time. Whether this revolution has rendered the ascent easier, must be left to the determination of future travellers.

DR. WOLFF'S MISSION TO BOKHARA.

From the Spectator.

Narrative of a Mission to Bokhara, in the years 1843–1845, *to ascertain the Fate of Colonel Stoddart and Captain Conolly. By the Rev. Joseph Wolff, D. D. LL. D.* In two volumes. Parker.

If the essence of a book of travels is vivacious description and a sound judgment —a picture of that which is visible to the sense, with the conclusions deduced from its observations by an intelligent mind— then is much of Dr. Wolff's *Mission to Bokhara* not to be called travels. On the contrary, it is of the nature of memoirs. The reverend missionary records the different friends he met or made, and the various compliments that were paid him by public functionaries, moved thereunto perhaps by the letters out of which Captain Chairman Grover had badgered the Foreign Office, or by private individuals from good-natured politeness; together with the epistles he wrote and received in the course of his journey, and translations of the Oriental documents having a reference to his mission. With such matters are mingled reminiscences of his former life or travels, digressions as to the state of Christianity, Mahometanism, Paganism, and the Jews, with the memorandums of his own performance of divine service. And very often when he does record his own movements, they are little more than bald jottings.

Nor was all of the 5,650 miles which Dr. Wolff passed over of a very remarkable character. Such is the progress of steam, that the journey from Southampton to Trebisond on the Black Sea, though 3,800 miles, is less inconvenient than a crowded steam-trip to Margate, bating the sea-sickness. The 1,300 miles from Trebisond to Meshed in Khorassan, where the power of Persia ceases, was without danger; but it is always fatiguing, from the absence of roads and accommodations, with the necessity of riding "tatar." The hardships were increased in Dr. Wolff's case, because he passed the bleak mountains of Armenia in the depth of winter, when men were perishing in the snow; and he could not ride. He wished to walk, but his friends protested against it; and he had a man to lead his horse over the mountains. As we hear nothing of his troubles from this source on his return, we infer that the rough-riding Asiatics have turned him out an equestrian.

From Meshed to Bokhara difficulties and dangers began. There was the Toorkman desert, and the roving Toorkmans—less troublesome now than they were some years since, when poor Conolly was robbed and mal-treated by them, but still thieves and man-stealers. It happened, unluckily, that the chieftain to whom Dr. Wolff was given in charge by the Persian ruler at Meshed, was a greater rogue than the tribes from which he was engaged to defend the worthy missionary. However, Persia on one side, and Bokhara on the other, kept Dil Assa Khan from doing much more "than trying it on" upon the Doctor's purse, and ineffectually endeavoring to play the traitor, or rather ambassador on his own account, at Bokhara,

In this Mahometan Oxford the risk of Dr. Wolff was, no doubt, very great, from the uncertainty of barbarian passion and Eastern caprice, which might be tempted in a moment to perpetrate a crime that it had made up its mind to avoid. But, without wishing in the slightest degree to underrate the courage or philanthropy of the excellent missionary, and believing that he was fully impressed with an idea of impending death, we suspect his real danger was inconsiderable, save from momentary rage. The Ameer seems to have a superstitious and mysterious dread impending over him on account of the deaths of Stoddart and Conolly. He has, for the first time, failed in expeditions against his neighbors, which he sets down as a judgment; he seems to have an idea that he has a blood-feud with Great Britain on his hands, without exactly knowing its nature or extent, or from what quarter the avenger is likely to come: and in this point of view the total silence of the British government, whilst missives poured in from the Sultan, the Shah, and the Russian Ambassador, might have had its effect. The confidence and free speech of Dr. Wolff at first sight looks as if likely to provoke; but

> "Our indiscretion sometimes serves us well,
> When our deep plots do pall"

The Doctor's insignia and full canonicals, his entering in procession, and his subsequent denunciation of the Chief of Artillery, in reality Prime Minister, might have their effect among Asiatics "perplexed in the extreme." He thus approached and entered Bokhara.

"I was dressed in full canonicals the entire distance from Mowr to Bokhara; being determined never to lose sight of my position as mullah, [priest,] on which alone my safety depended, I soon perceived. I also kept the Bible open in my hand: I felt my power was in the Book, and that its might would sustain me. The uncommon character of these proceedings attracted crowds from Shahr Islam to Bokhara; all which was favorable to me; since if I was doomed to death, it would be widely known, and the consequences might be even serious to the Ameer himself, of interfering with a sacred character, armed with the Book of Mousa, [Moses,] and David, and Jesus, protected by the word of the Khaleefa of Mowr, supported by the Sultan, the Shah of Persia, the Russian Ambassador, the Asaffood-Dowla, both by word and letters, and the popular principle among the Mussulmans, as testified on my route in shouts of 'Selaam Aleikoom,' 'Peace be with you.'" * *

"My villain escort, Dil Assa Khan, then came up to me and said, 'You ought to enter Bokhara dressed as a poor man.' I replied, 'Villain, liar, and man-seller, (for strong terms alone are effective in the East,) leave me. The Asaffood-Dowla will surely put you to death when we reach Meshed.' Dil Assa Khan turned deadly pale. Shouts of 'Selaam Aleikoom,' from thousands, rang upon my ear. It was a most astonishing sight: people from the roofs of the houses, the Nogay Tatars of Russia, the Cassacks and Girgesh, from the deserts, the Tartar from Garkand, or Chinese Tartars, the merchant of Cashmeer, the Serkerdeha or Grandees of the King on horseback, the Affgauns, the numerous water-carriers, stopped still and looked at me; Jews, with their little caps, the distinguishing badge of the Jews of Bokhara; the inhabitants of Khokand politely smiling at me; and the mullahs from Chekarpoor and Sinde looking at me and saying 'Ingles Saib;' veiled women screaming to each other, 'Englees Eljee, English Ambassador;' others coming by them and saying, 'He is not an Eljee, but the Grand Derveesh, Derveesh Kelaun, of Englistaun.'"

THE RECEPTION.

Before we were carried to our assigned quarters, we were brought what they emphatically call "*bala*," *up* to the palace of the King. This is situated on a lofty eminence. When we reached it, the Sekerdeha, *i. e.* the Grandees of the Empire, were just leaving it, riding upon horseback. The people crowded in masses on me, demanding, "What book have you in your hand?" I replied, "The *Towrat-e-Moosa*, (Laws of Moses,) the *Saboor-e Dawood*, (Psalms of David,) and the *Anjeel-e-Esau*, (Gospel of Christ,) and the Prophecies of Daniel, Isaiah, Ezekiel, Jeremiah," &c. Devoutly did those poor unenlightened souls touch the Book. At the entrance of the palace-gate, we were ordered to dismount from our horses. Only the Grandees of the Empire, and Ambassadors of the Sultan of Constantinople, of the Shah of Persia, should they come to Bokhara, are permitted

to enter the palace-gates on horseback: no Christian, Heathen, or any other ambassador, is allowed that privilege. Singular to say, however, I was allowed this privilege at my audience of leave prior to my departure from Bokhara.

Previous to our entrance, one of his Majesty's Makhrams appeared before me and said, "His Majesty condescends to ask whether you would be ready to submit to the mode of Selaam, (for Stoddart Saib refused and drew his sword)." I asked, "In what does the Selaam consist?" He replied, "You are placed before his Majesty, who will sit upon the Bala Hanah, (from whence Balkan is derived); and the Shekawl (Minister of Foreign Affairs) will take hold of your shoulders, and you must stroke your beard three times, and three times bow, saying at each time, 'Allah Akbar, Allah Akbar, Allah Akbar,'—'God is the greatest, God is the greatest, God is the greatest;' 'Salaamat Padishah,'—'Peace to the King.'" On being asked if I would do so three times, I said, "Thirty times if necessary." Entering the gate, we were desired to sit down upon a stone seat; and after a few minutes' delay, were ordered to send up our letters. * *

After the letters were sent up, we were brought before the King, Dil Assa Khan and myself. His Majesty was seated in the balcony of his palace, looking down upon us; thousands of people in the distance. All eyes were bent on me, to see if I would submit to the etiquette. When the Shekawl took hold of my shoulders, I not only submitted to his doing so to me three times, but I bowed repeatedly, and exclaimed unceasingly, "Peace to the King," until his Majesty burst into a fit of laughter; and of course all the rest standing round us. His Majesty said, "enough, enough, enough." We were then ordered to retire. The Shekawl, an officer who answers to our Secretary of State for Foreign Affairs, then assured me that his Majesty had smiled upon me, and exclaimed, "What an extraordinary man this Englishman is, in his eyes, and his dress, and the Book in his hand."

The reported particulars of the deaths of Stoddart and Conolly do not differ from those already before the public; but in truth the information on this point is vague. The very time of their execution is uncertain; Dr. Wolff cannot positively make out whether it was in 1842 or 1843. The King and his Minister both fix 1843; but in reckoning it by the months on his beads, the Minister carried it back to 1842. The primary cause of offence seems to have been the imprudence of Stoddart in behaving with rough rudeness on more than one occasion; for which he was imprisoned. To procure liberty, he is said to have turned Mussulman, and then relapsed; which by Mahometan law is death. According to Abdul Samut Khan, the Chief of Artillery, in the following narrative to Dr. Wolff, the after incidents were in this wise:—

"At last it was agreed that he should write to England, to be acknowledged as the acredited agent of Great Britain, at the Court of Bokhara, and that the King of Bokhara should be the acknowledged Sovereign of Turkistaun, &c.; and Colonel Stoddart promised that in four months an answer should arrive from the Government of England. Though at his (Stoddart's) request, japar khanas (post-houses) were established from Bokhara to Sarakhs which did not exist either at Bokhara or in the land of Turkistaun from the time of Afrasiah, *fourteen months* elapsed, and no answer arrived. During the time that Colonel Stoddart was at Bokhara, Captain Conolly went from Organtsh (Khiva) to Khokand; where he stopped a considerable time, exciting both countries to wage war against the Ameer of Bokhara. He at last arrived at Bokhara, announcing himself as a British agent, without having any letters from the British Government; and whatever Colonel Stoddart had agreed to he upset, announcing to the King of Bokhara that the British Government would never interfere with the affairs of Turkistaun; and all that Colonel Stoddart had agreed to went for nothing. Thus it was clear that Colonel Stoddart was a liar. During the stay of Conolly and Stoddart, they took every opportunity of despatching, in the most stealthy manner, letters to Cabul; and on this account his Majesty became displeased; and both Captain Conolly and Colonel Stoddart were brought with their hands tied, behind the Ark, (palace of the King,) in presence of Makhram Saadat; when Colonel Stoddart and Captain Conolly kissed each other, and Colonel Stoddart said to Saadat, 'Tell the Ameer that I die a disbeliever in Muhamed, but a believer in Jesus; that I am a Christian, and a Christian I die.' And Conolly said, 'Stoddart, we shall see each other in Paradise, (Behesht,) near Jesus.' Then Saadat gave the order to cut off first the head of Stoddart, which was done; and in the same manner the head of Conolly was cut off.

"*W.* I thought strangling was the mode of killing at Bokhara.

"*N.* Strangling was formerly used; but the King of Bokhara said, 'Strangling gives more pain, and the rascally Khan of Khiva strangles people; and therefore, out of mercy, I command the heads of evil-doers to be cut off with a common knife."

The detention of Dr. Wolff at Bokhara—his often, as we incline to think, groundless fears as to his danger—his virulent abuse of Abdul Samut Khan to his face, upon suspicions which do not really seem to be proved—his proposal (in order to get away) that the Ameer should send an ambassador

to England, which was actually done, and the envoy befooled as far as Constantinople, if not farther, to the manifest danger of any other travellers or agent that should venture into Bokhora—may be read at large in the volumes; and amusing enough it all is. Nor are the passages of self-biography wanting in entertainment, from the obvious bonhommie and good faith of the reverend man,—as if a tinge of Asiatic simplicity were lingering in his Hebrew blood. What there is, too, of real travels—perhaps one-third of the volumes—is very good of its kind. Graphic description, scientific observation, or high-wrought narrative of scenes of novelty, wildness, or danger, will not be found; but Dr. Wolff has qualities that have enabled him to present a transcript of Asiatic characteristics. His extensive knowledge of the Oriental languages, his long experience of the people in his former travels, his acquaintance with the Jews, and the éclat that attended his coming, as well as his character of "mullah," brought him into contact with vast numbers of persons. It may be objected, that with such opportunities Dr. Wolff ought to have written a better book: and this is doubtless the fact; but his very literalness secures a certain species of truth, especially in conjunction with his Oriental cast of mind. The novelty, too, of the field must also be considered: a rare weed is more prized than a common flower.

JEWISH TEST OF RELIGION.

The Jews of Bokhara have taken courage, and called on me. The name of Sir Moses Montefiore, and the rumor of his exertions for the benefit of the Jewish nation, have reached their ears, and those of their brethren in Samarcand, Balkh, Khokand, and Heraut. And Sir Moses Montefiore will be surprised to learn that his exertions in behalf of the Jews have drawn the attention of the Jews in those distant regions to the doctrines of Christianity: for many Jews, when at Bokhara, observed to me that the religion of the Gentiles in England must absolutely be better than that of Muhammed, as the proceedings of Sir Moses Montefiore, in behalf of the Jews, are not only tolerated, but also countenanced, supported, recommended, and eulogized. And about Rothschild they say, that in a country where one can so openly make a display of one's property, the religion of that nation must be better.

THE FOUR GRAND VIZIERS OF ENGLAND.

The Ameer wished another day to have the names of four grand Viziers, and twelve little Viziers of England, and the forty-two Elders. I gave to his Majesty a list of the names of the present Ministry; when the Makhram returned in a fury, and said that his Majesty had found me out to be a *liar*, for the four grand Viziers, according to Colonel Stoddart's account, were Laard Maleburne, Laard Jaan Rawsall, Laard Malegrave, Seere Jaane Habehaase. I was brought into the King, and then had to give a complete idea of the constitution of England; which, though his Majesty could not understand it fully, yet I convinced him that my list might be true also, especially as I was able to tell him the names of the Whig Administration.

A SCEPTIC IN BOKHARA.

At this time Muhammed Baker Nakash, *i. e.* the painter, formerly in the service of Conolly, loudly exclaimed in a bath, "The Frankee are by far better than the Mussulmauns. Muhammed was no prophet. He was a cruel tyrant, and thus are his followers. There is one God, but no prophet does exist." He was brought before the Sheikh Islam, and questioned about his public declaration.

Sheikh al-Islam (to Muhammed Bakher.) Is it true that you have made such a declaration?

Muhammed Bakher. Yes! I have loudly proclaimed that there is no prophet.

Sh. Do you believe, perhaps, that Jesus is a prophet?

M. B. No.

Sh. Mullah Yousuf Wolff does not agree with you; for he believes that Jesus is not only a prophet, but he calls him also the Son of God.

M. B. I believe no prophet: but Jesus was a better man than Muhammed, and the followers of Jesus are better than the followers of Muhammed.

Muhammed Bakher was then sent to prison and flogged, but without any use.

USE OF HEBREW.

Every moment a spy from the King came to ask me what I did. The Jews, however, had the courage to come; and I advised them to come when the King's Makhrams were with me; when each of us looked in a Hebrew Bible, as if we were reading, and thus carried on our conversation in Hebrew in the presence of the Usbecks, who all the time believed that we were reading the book by turn, whilst I learnt every particular of the conduct of the King and the Nayeb towards Stoddart and Conolly, particulars of the death of the latter, and of the licentious and tyranical conduct of the King. Conversations not political we carried on in Persian.

A PERSIAN HUSBAND.

We thus proceeded, by order of the King, to Jesman-doo. Muhammed Taki the astrologer from Heraut, who came with Abbas Kouli

Khan from Persia, for the purpose of getting, by the Shah's influence with the Ameer, his wife, who had been made a slave of by the Turkomauns, both recovered her, and, besides this, received one hundred ducats from the Ameer. When he came to the garden of Jesman-Doo, to our surprise, without his wife, Abbas Kouli Khan asked him, "Where is your wife?" He replied, "I have looked in the stars for two or three nights successively, and seen one star with a black tail, from which I perceive that misery is *entailed* upon her; and therefore I have re-sold her for forty ducats and a beautiful high-bosomed slave girl, only seventeen." I never saw in my life a man so incensed as Abbas Kouli Khan. He rose from the ground, cast away his galyoon with such violence that it broke to pieces, and said, "God burn you and your stars! You rascal, you did not look on the stars, but on the money and the beauty of the young girl. I spit in your beard."

A TRUE HIT.

An Affghaun Seyd entered the garden, and said, "Aye, you Kafir! have you succeeeded in cheating the Ameer, so that he let you go? If he had only given you into my hands, I would soon have made away with you by my javelin." Abbas Kouli Khan said to him, "Go, and leave the Frankee alone; he is a derveesh." "A derveesh!" he sneeringly replied, "I know these Frankee derveeshes—I know these English derveeshes. They go into a country, spy out mountains and valleys, seas, and rivers; find out a convenient adit, and then go home; inform a gentleman there—a chief, who has the name of *Company*, who sends soldiers, and then takes a country. Tell him what I say." After this he left the garden.

GEORGIAN CHRISTIANS.

On the 18th of November, I arrived at Sanjoon, built according to Jewish tradition, by Ahasuerus. There is a Georgian there, Yakoob Khan by name, who is in the service of the Persian army, and occupies the situation of Colonel. He practises secretly the Christian religion, and has all his children baptized; and as his wife was just confined, he requested me to baptize the child, which I did; and Mullah Mehdee, my baptized convert, was god-father. I pressed upon Yakoob Khan the duty of confessing the name of Christ publicly; upon which he begged me to recommend him to the Queen of England, in order to be made a Colonel in the British army. Then he said he would immediately go to England, profess openly Christianity in the Colonel's uniform, and sword in hand. I could not give him any encouragement. I found there another young Georgian; who told me, if I did not take him on to England, and put him in the way to make money, he would turn Mussulman in spite of me. I told him he was welcome to do so.

MRS. HAMILTON GRAY'S HISTORY OF ETRURIA.

From the North British Review.

The History of Etruria: By Mrs. Hamilton Gray. Parts I. and II. 8vo. London, 1843–4.

Of all the countries lying on the Mediterranean sea, upon whose shores the great empires that have swayed the destinies of the world have successively risen, flourished, and decayed, to us, Englishmen, Italy stands connected by the most peculiar and personal ties. If in other of those regions the sacred truths of our religion were first revealed, and another, a Holy Land, witnessed the great facts upon which our hope rests, yet from Italy came first the glad tidings of salvation to our ears: if science flourished more thrivingly on the banks of the Nile, and the purity and sublimity of Grecian art have never been surpassed, yet we cannot forget, that from that "home of all art" these riches were brought within our grasp. Even now, fallen and degraded as Italy is from her high place among the nations, who can tread that land of beauty, and gaze upon her majestic ruins, without feeling that

> "Her decay
> Is still impregnate with divinity?"

Though much of our regard is derived from her being thus the channel through which the influences of other countries have reached us, yet the great and distinctive virtues of Rome were of native growth. The lofty spirit of independence, the noble efforts of self-denial, the fervent patriotism and filial reverence for law, order, and national institutions, which made her "a commonwealth of kings," were essentially her own. Those very arts and sciences, and that same learning of civilized Greece, of which we delight to find traces among her ruins, brought a flood of luxury and corruption, against which her wisest poets and truest patriots exclaimed, while they looked back with longing eyes to the stern simplicity of their Latin and Sabine forefathers.

It is, therefore, in Rome's earlier history that we take the deepest interest; there we trace the rise and development of that spirit, which led the Imperial city on to conquest and dominion,—and not only this, but we learn the secret of that wise polity, which retained each acquisition, and made it the seat of fresh attacks; we gain a

knowledge of the principles by which the walls of her power were so closely cemented, that long after the old vigor had departed from the men of Rome, and the free breath of liberty from her institutions, her dominion stood firm—in spite of all attacks from within and without—and when at last it fell, its own weight was its ruin.

But in this earlier portion of Roman history, we meet with allusions to a neighboring nation, who appear to have then occupied the first place in civilization, and occasionally in dominion, of all the kingdoms in Italy. These are the Etruscans, who, long before the period in which the foundation of Rome is placed, flourished, a rich, commercial, and highly cultivated people. The earliest institutions of Rome were Etruscan. Etruria was the parent of her religion—thence were derived the principles of her primitive constitution and government. The Tarquins were an Etruscan family, and we are almost tempted to believe Rome herself an Etruscan city. After the connexion which at first subsisted between her and Etruria was broken, and the popular element burst out against the Tarquins and their aristocratic faction, a war, fierce and exterminating, was, from time to time, maintained between the rival states; which, with alternate success, binding the Romans at one period in an ignominious peace, at last ended in the utter downfall of Etruscan independence. Yet even then, the religious rites and ceremonies of Etruria, her emblems of power, the Lictors, the Fasces, and the Curule chair, remained witnesses of her former influence; the reputation of her augurs and diviners subsisted until the first ages of the Empire; and the noble youth of Rome received the first lessons of science and learning in Etruscan seminaries, until the philosophy of Greece prevailed, and the colleges of Etruria were deserted for the groves of Academe.

Etruria, thus closely connected with Rome, and offering subjects of great interest for consideration, has left but few materials from which to trace her history. It belongs to a period to which authentic annals have not reached. There are architectural fragments, but the name and memory of their builders is gone. Such vestiges of cities and towns as have resisted the ravages of the Roman, the Vandal, and the Goth, are occasionally found, but their very names are a subject of dispute among the learned. There is a language in which we find inscriptions. They are legible, for the character is like the ancient Greek or Phœnician. We can trace the letters and form words, but their meaning is hidden. They are more unintelligible than the hieroglyphics of Egypt, in which the priests wrapt up their learning from the vulgar, but whose mysteries have been unravelled by antiquarian research. Two words alone have been as yet interpreted. Ril avil—"years lived." The sentence seems an epitome of our Etruscan history.

And yet amidst all this obscurity, some light has been thrown upon the subject. One class of remains is rich in information. The funeral monuments of Etruria show us their mode of life. They perpetuated it in their graves. There we can read largely of their customs and habits and manners. The contents of these tombs tells us of their widely-extended trade and commerce. They enclose the products of Greece and Egypt, and even of Persia and India.

In the desolate and forsaken region which lies round the walls of Rome—fit setting for her majestic ruins—amid the remains of cities and towns, and beside the long lines of broken aqueducts which span these deserted plains, stand the sepulchres of Etruria. Here are innumerable tombs and funeral caves, of all forms and descriptions. On the surface is every grade, from the low mound of earth—like those which stand thick in our country church-yards—to the lofty tower which vies in magnificence with the mole of Hadrian or the mausoleums of the East; and beneath, from the simple grave—just sufficiently scooped out to receive the body—to excavated chambers, with interior and exterior rooms of large dimensions, and enclosing whole families of the dead.

Mrs. Gray's former work, "The Tour to the Sepulchres of Etruria," which met with deserved and general attention, is full of the most interesting details. It has passed into three editions, and the beauty and interest of the discoveries she first unfolded to an English public, have attracted all readers. She speaks there of the city of Tarquinia, one of the most celebrated of Etruscan towns,—whose remains still occupy the summit of one of the hills overhanging the desolate Campagna of Rome, with its sister hill, on which are the last resting places of its inhabitants—a city of the dead,—with its streets and squares and gates, standing in perpetual contrast to the city of the living opposite. She describes, with untiring accuracy, the interiors of

these sepulchres, adorned in various and many ways; the walls covered with painted representations of funeral feasts and games, or the luxurious entertainments of the age; and enclosing, beside the sarcophagus for the body, those articles which were deemed most precious,—vases, and shields, and costly ornaments. On those walls, too, is told with fearful distinctness, the tale which Etrurian refinement and luxury could not altogether shut out, of the Good and the Evil genius, that maintained a fierce war for the possession of the man, and the dark angel of death, driving a promiscuous crowd—young and old, the lover and his mistress, the warrior and his sword, the usurer and his money—to one common and final doom. In one tomb were arranged in rows, round the spacious apartment, the stone coffins of an illustrious family, whose lids were formed of sculptured effigies of the dead within. In another, lay alone, a warrior with a crown of gold on his head, and his armor on. His shield, spear, and arrows, were by his side. He was stretched on a brazen bier, and above him hung the trophies of his victories. But whilst the discoverer looked—so Mrs. Gray reports his story in her present work—

"A sudden change came o'er the scene, and startled Avolta from his astonished contemplation; a slight tremor, like that of a sand in an hour-glass, seemed to agitate the figure, and in a few minutes it vanished into air and disappeared. When he entered the tomb, the golden crown, some fragments of arms, and a few handfuls of dust, were all that marked the last resting place of this Tarquinian chief."—P. 297.

These are some of the wonders which one Eutruscan city, the site of the modern Corneto, affords, and to which the zeal, industry, and ability of Mrs. Gray have done so much justice.

We were glad, then, to meet our fair and learned country-woman upon the field of Eutruscan antiquity again. The work which we have now before us, is another proof of her devotion to these interesting inquiries. We congratulate her on her courage in entering on a subject so difficult and obscure as the early history of this people; and though we may have occasion to differ from some of her conclusions, yet the modesty with which her views are put forth disarms critcism, whilst her talents and learning are fully adequate to meet any that can be offered.

Her plan is to present a history of the Etruscan people from their origin to their end,—to be divided into four parts. The first part from the foundation of Tarquinia to the foundation of Rome, will occupy our attention at present. Besides their history, the authoress intends giving a short account of the manners and customs, arts and sciences, religion and commerce, of the Etruscans.

Etruria included the most beautiful and favored portion of Italy, occupying that littoral part of the peninsula which is inclosed between the Apennines and the sea; from Pisa and the Arno on the north, stretching over the fertile land of Tuscany, where Florence still retains the claim to be called "the Etrurian Athens," and along the plain now occupied by the Maremma of Tuscany and the Campagna of Rome, to the Tiber for her southern boundary. She never extended her permanent dominion beyond these limits. Her people were distinguished for their commerce and learning among the nations of Italy, and by something of that love of art, and contentment with their lot, which is now so characteristic of the population of Tuscany.

The views of our authoress respecting the origin of the Etruscans, may be shortly summed up. She says their proper name, that by which they called themselves, was Rasena—essentially the same with TyRSENi, or Tyrrheni, which was a name commonly applied to them, and derived, she says, from their great leader, Tyrrhenus, or Tyrsenus, or Tarchon, or Tarquin. Examining the story of Herodotus about this people, who says that the Tyrseni were a colony from Lydia, under Tyrsenus, son of the king of that country, and the curious and well-known account he gives of the reason of their emigration—a famine, which lasted eighteen years, and to relieve themselves from which they invented the ingenious game of chess, or draughts, which occupied their attention so fully, that they could play and fast every other day—she decides against its credibility, and rejects the Lydian origin of the nation. She however, admits that they arrived in Italy by sea. She supposes the place of their real origin to be Resen, a city of Assyria, mentioned in the book of Genesis. From the similarity between the Etruscans and the Egyptians, she supposes that a large colony from this city of Resen dwelt for a long time in Egypt. There she connects them with the shepherd kings, or Hyksos; of whose rule in Lower Egypt there are many

traditions, and of which she supposes that it comprehended the various bands of foreigners, including the Jews, who occupied the fertile Delta of the Nile. She identifies the colonists of Resin and future Etruscans with the scientific Assyrians, who are spoken of by Herodotus as dwelling in Egypt, and building the Pyramids of Cheops and Cephrenes. At last the native Egyptians, who had retreated up the country, drove these strangers out, and forced them, according to Mrs. Gray, into Libya, or Lybia. After inhabiting that country for a short time—whence she supposes the mistake of Herodotus putting Lydia for Lybia, unless he confounded the term "Ludeni" or Assyrians, with "Lydians,"—they took ship, and, landing on the opposite coast of Umbri, founded the kingdom of Etruria. The time of their arrival she takes from the story of Plutarch, that, in the year of Rome, 666, when Sylla finally extinguished all hopes of Etruscan independence, an Etruscan Aruspex proclaimed that the Etruscan day of 1100 years, during which their Jupiter, Tina, had given them dominion, was near an end. To use her own language—

"We think," she says, "that we can discern them, a stately band issuing from beneath the lofty gateways of the high-walled and proudly-towered Resen—that great city, as ancient as Memphis and Zoan. Thence we follow them on the banks of the Nile, and behold them mingling in fellowship with the victorious Assyrians, and with the seed of Israel, on the fertile nomes of Lower Egypt: until at length the avenging arm of the legitimate Pharaoh delivered his country from Asiatic oppression, and drove the men of Resen to seek for settlements elsewhere. After their second exile, we trace them to a welcome Italian home, whither they brought the arts, the arms, the luxuries, and the sciences, which they had originally possessed in India, and on which they had engrafted the learning of the wisest of nations.

"Here they became dominant lords of the soil, and beneficent victors, conquering, civilizing, and blessing the ruder people of the West, until the mysterious times of their dominion being ended, and the sand of their promised ages of glory having run, they sunk into the subordinate state of a conquered nation, and were soon absorbed in the all-engrossing Senatus Populusque Romanus."—P. 24.

These views as to the early history of Etruria are proposed with diffidence, and, amid the numerous difficulties which invest the subject, are entitled to weight.

The two other theories which have attracted most attention are that of Niebuhr, and his German followers, (among whom is Müller, who has written a history of the Etruscans,) and that of Mannert. Niebuhr assigns the Etruscans an origin in the mountainous district at the top of the Adriatic sea, and supposes that they thence descended into Etruria. Mannert accepts the account of Herodotus as literally true: and conceives that the Pelasgians, whose original seat he states to have been Thessaly, were forced to abandon that country, some of them taking refuge in Italy, whilst others went to Lydia and the districts of Asia Minor; and that, at a subsequent period, the settlers in Lydia sailed to Umbria, and renewed their connexion with the earlier colonists. We shall, in the course of this article, adduce some reasons for believing that the Etruscans did come from Lydia, and that they did belong to a branch of the Pelasgian tribe. With the Thessalian origin of the Pelasgians we have at present nothing to do. The difficulty that besets Niebuhr's theory, besides his entire refusal of credit to the account of Herodotus, is the eastern character, the arts and sciences, letters and learning of the Etruscans. These, which are the peculiar characteristics of the people, and for the origin of which we are inquiring, cannot be supposed to have been practised by Alpine mountaineers, or brought down by them into Italy, There is no doubt, indeed, that some of the original inhabitants of Italy took this road from Asia—the cradle of the human race: but that is a very different question.

We confess our strong predilection for the father of history: there is a simple and earnest truthfulness about his narration that carries an inward conviction with it. Every succeeding age—each step in geographical discovery, has born him out. Let us see whether it is not the case in this instance: and we think it of far more importance that the veracity of this great and oldest historian should be established, than that a host of opposite theories and hypotheses should be made plausible.

Herodotus spoke generally from having actual intercourse with the countries he describes, and access to the best information which they possessed. His knowledge of the traditions of Asia Minor was, of course, complete; and he spent some time in Magna Græcia. The tradition, which he says the Lydians repeated in his day, was asserted by them 500 years after with equal

positiveness. The Sardians, in the time of Tiberius, asserted their common origin with the Etruscans and the Peloponnesians. The story was universally believed in Rome in the time of the historian Dionysius. As to his disbelief of it, because it is omitted by the historian of Lydia, this omission has no weight placed beside the positive testimony of Herodotus. But besides this external testimony, there is the internal evidence for its truth, or at least for the fact, that the colony which settled in Etruria did come from Asia Minor, and not from Africa or the Alps.

There are many similarities between the Etruscans and the inhabitants of Asia Minor and Syria. Their language, at least the names, belong to the Phœnician and the Hebrew dialects. Some of their peculiar notions of religion belong to the Phœnicians; and it is singular that the monuments which give us most information about the Etruscan people, speak most strongly for their connexion with Asia Minor. Their funeral monuments are alike. The three celebrated tombs of Etruria—that of Porsenna, the conquerer of Rome, as described by Pliny; of Aruns his son, still remaining at the side of the road from Rome to Albano, just at the entrance of the town; and the magnificent Regulini-Galassi sepulchre, at Cœre, which Mrs. Gray so fully describes in her former work, were of precisely similar construction to that of the tomb of Alyattes, still visible at Sardis, and described by Herodotus (i. 93) as erected to the memory of that king. There is a low circular wall sorrounding the receptacle of the body, and rising from and resting on this wall, a conicle mound of earth or stones. But it is from the latest discoveries among the antiquities of Asia Minor, that we derive the strongest reason for accepting the account of the old historian. It is our ignorance which has hitherto induced us to doubt it. The researches of Sir Charles Fellowes have established the strongest analogy between the tombs of the original inhabitants of Asia Minor and Lycia, and some of the most remarkable and distinctive sepulchres of Etruria. These are the wonderful rock tombs of Castel d'Azzo, of which an admirable account was given in Mrs. Gray's earlier work, to the fidelity of whose description we can ourselves testify.

Few spots are more strikingly situated than Castel d'Azzo. After traversing some miles of the comparatively level country near Viterbo, the traveller comes to a deep fissure in the plain, and descending to the bottom, he finds it gradually widening, and at length joining with a similar ravine, it opens out into a little sunny amphitheatre, over which hang the ruins of an old feudal castle. The rocky walls of this valley, high overhead, are marked with figures of doors, pediments, and various architectural ornaments and inscriptions, all traced by deep lines in the living rock. Beneath each doorway, but considerably below it, is a cavern containing sarcophagi and the remains of the dead. Now, Mrs. Gray supposes, and with good grounds, that this was the Fanum Voltumnæ, or general assembling place of the Etruscans, and that this honored burying-ground was reserved for the leading chiefs and nobles. This order was hereditary in Etruria. Doubtless as in our own country the best blood of the kingdom belongs to those whose ancestors came over with the Conqueror, the families of the first colonists or conquerors in Etruria would be the highest and noblest in the land. The customs of the great would then be the customs of the country from which the colonists came. This would especially be the case with funeral rites—the usages which man keeps up with most tenacity. Now, the exact antitype to these rock-tombs is found in Lycia and Asia Minor. In his account of Discoveries in Lycia published in 1840, Sir C. Fellowes describes the tombs and architectural representations, as appearing on every cliff as he travelled up the country and the valleys of Asia Minor. There, as might be expected, instead of being confined to a single spot, as in Etruria, the custom was general. Sir C. Fellowes speaks of these early specimens of represented buildings on the rocks, as giving a perfect insight into the construction of the ordinary dwellings of those remote ages. Generally every city is perched upon a hill, and has the sides of its rock pierced with tombs, sometimes high and inaccessible, and at other times near and distinct: presenting every variety of form, from the earlier Lycian monuments to the form adopted by the Greek colonists when engrafting their architecture upon the old model. Every page of Sir C. Fellowes's most interesting narrative, and every plate of his beautiful sketches, tells the same tale, and confirms the Lydian origin of the Etruscans. Besides some of these tombs have interiors ornamented with bas reliefs representing

domestic scenes, and illustrating mythological stories, as in the pictured tombs of Etruria, and even colored with the bright blues, yellows, and reds which abound so much in the Etruscan caverns. The analogy seems to have forcibly struck Sir C. Fellowes; and it is fully explained by, and firmly corroborates the story of Herodotus, the accuracy of whose traditions, and the care with which he selected them, are daily more and more felt and recognized.

We are well aware that sepulchral caverns are found in the upper parts of Egypt; that they extend through the rugged mountains of Petræa to the south of the Dead Sea, and along the shores of Palestine; that some most remarkable specimens of sculptured friezes are found in the valley of Jehosaphat, near Jerusalem, and that the Etrurian mode of closing these caverns with a stone moving on pivots, has always prevailed, and is still observed in Judea and Syria. But this only shows the probability of an early migration, not from Egypt to Lybia, and thence to Italy, as Mrs. Gray supposes, but from Egypt to Asia Minor and Lydia, and from Lydia to Italy—the old tradition stated by Sir Walter Raleigh in discussing the title of Larth, common to Egypt and Etruria. The Philistines were clearly from Egypt, (Genesis x. 14,) and so were many other of the Phœnicians. Their original laws and customs were the same. Agenor, king of Phœnicia, was said to be the son of Neptune and Libya. This connexion between the Phœnicians, or people of the coast of Asia Minor and Syria, and the Egyptians, and the evidence we have shown for the Etruscans having come from those countries, explains the striking resemblance between their antiquities and those of Egypt, which has made it impossible sometimes to give a distinctive character to the productions of each; a similarity which was doubtless increased by the actual trade kept up between Egypt and Etruria.

We have dwelt thus upon the origin of the Etruscans, because it is really the most interesting inquiry in the work before us, being, in fact, the origin of Italian civilization; and on account of the interest of the recent discoveries, and the light they throw on the value of the work of Herodotus.

A point of great importance in the history of the Etruscans, on their arrival in Italy, seems to be the fact that they effected their settlement in the land with the good will of the previous occupants: that the friendly spirit with which they were received, and the conciliating temper which they adopted, soon led to great intercourse between the old and new inhabitants of the land, and finally connected them together as one common people.

"Each people," says our authoress, "dwelt indifferently in the towns of the other; the Tuscan language was understood and spoken, as we have reason to know, throughout Umbria, and the Rasena, as their history proves to us, had the wise and singular policy of making with those whom they had conquered, such a peace as gave them a share in the government, and an equal interest in the permanence and prosperity of the state; thus nullifying all feelings of humiliation and hostility, and converting them from bitter enemies into grateful allies and indissoluble friends." —P. 69.

Here is the first instance of that policy, which afterwards, in the hands of the Romans, made their universal dominion permanent, by gradually connecting every conquered nation, by the ties of citizenship, with the conquerors. Many of the obscurities in the early Etruscan history are cleared away, when we find this assimilation of the older inhabitants of Italy with this people; for the Etrurians, gradually comprising in the circle of their power the other races of the Peninsula, the different theories of their origin may be reconciled by supposing them true of the different parts of which the nation was composed.

Mrs. Gray goes fully into the subject of the ancient inhabitants of Italy. The most curious part of this discussion is as to the Pelasgians, and who they really were. This point has distracted the learned men of all ages, and seems to have been as much disputed in the times of Herodotus and Strabo, as in our own. At present, however, we have only to deal with the connexion of the Pelasgians with Etruria. They are represented by our authoress as being in Italy on the arrival of the Etruscans, and a distinct people from them. A contrary opinion has generally been held, and the Tyrrheni-Pelasgi was another name for the Etruscans. Here again the researches of Sir C. Fellowes throw light upon the question.

The Pelasgi have left nothing to us of their language, manners, or customs—only their names, and a few doubtful traditions. The chief records of their existence are their architectural remains:—the walls of

enormous height and thickness, and built with immense stones, which are found throughout Italy and Greece and Asia Minor, occupying the highest point of every hill, the object of wonder to the present inhabitants, and, according to them, the work of the giants or magicians, or their master the devil. The higher road from Naples to Rome, by the Abruzzi, passes a line of these hill-forts, which seem to guard and overawe the plains below. They are a portion of a longer line extending from the Adriatic coast of Italy, opposite Greece, quite across the Peninsula. They recall to mind the fenced cities, walled up to heaven, which terrified the Israelites before their entrance into the Promised Land. These various remains have been classed by architects and antiquaries (and the distinction is as old as Pausanias) into the Cyclopean, the Pelasgic, and the Etruscan, according to the apparent art used in their construction;—the first being of large stones, so rudely piled together as to require the interstices to be filled up with smaller fragments; the second, of large stones, but fitting into each other; and the third of quadrangular stones, occasionally secured by cement. Now, the last are confessedly the work of Etrurian architects, and two well known instances are the Arco del Bove at Volterra, and the gates still remaining at Pæstum. The first notion about them was, that the rudest were the oldest, and the more artificial the production of later aud more civilized times. Mrs. Gray seems to maintain an opposite theory, and thinks that the ruder fragments in Italy at least were the production of the Pelasgi, who had imperfectly learned the art of building from the Etrurians, her master-masons. The latest investigations have, however, established, that all these kinds run into each other in the same building, and appear to have been in contemporaneous use; that they are, therefore, the productions of one and the same people: and from this we are enabled to confirm the tradition of the Sardians, as reported by Tacitus, that they or the people of Asia Minor, the Peloponnesians, or early colonists of Greece and the Etruscans, the early colonists of Italy, were of the same race.

At Mycenæ, in the Peloponnesus, the *εὐκτιμενον πτολιεθρον* of Homer, the two kinds called Pelasgic and Cyclopean are found together, and also an approximation to regular masonry of hewn stone or the Etruscan style. These walls are described by Pausanias, whose description, we are informed by a traveller who visited them last year, is the best guide to them now. In many Italian provinces, Mrs. Gray tells us, there are Cyclopean, Pelasgic, and Etruscan walls of the same age, and in very many instances, there is a mixture of the Etruscan and Pelasgic, and the Etruscan and Cyclopean styles. At Cadyanda, in Lycia, Sir C. Fellowes tells us (Lycia, p. 121,) the Cyclopean walls of the city are blended with the more regular Greek, (that is, old Greek,) and were evidently constructed at the same period; and again, at Panora, (p. 141,) he observed the Cyclopean, so often considered as the older, surmounting the regular squared walls; and in that country the sculptured friezes, and rock tombs are found in conjunction with the Cyclopean walls. When we find thus the only authentic record of the Pelasgi, bringing them into so close union with the Etruscans, we cannot but accept the account of their being the Tyrrheni-Pelasgians, or Pelasgians who settled in Italy. There are many other circumstances, such as their knowledge of letters, regular institutions, and use of arms, which connect them with the early Grecian settlers, and antiquaries have dwelt upon Cecrops' twelve cities of Attica and the twelve cities of Etruria, as offering additional evidence. Of course, in a subject of this kind, the evidence itself is slight and indirect, but if we find all that there is pointing in one direction, we are bound to follow it.

Our authoress states that the Etruscans who landed in Umbria, had for their leader Tarchon, a name known to the readers of Virgil. She gives him a high place among the heroes of the olden time. He founded Tarquinia, the city whose interesting antiquities and remains we have before mentioned. She devotes much space in her work to the institutions which he established, and enters into large dissertations on the passages to be found in classical writers, respecting the earliest heroes of Italy, conceiving their stories of Janus, Saturn, and Hercules, to be but traditionary recollections of this great leader. Into these discussions we shall not now enter, nor into the subject of the colonization of the cities of Magna Græcia, with which her concluding chapters are occupied. We think our readers will be more interested in her account of the institutions founded among the Etruscans by Tarchon, and in getting

an insight into their national and religious character.

These institutions were said to be derived from Tages, the supposed lawgiver of the nation, who was fabled to have been found in a furrow by Tarchon, having the gray head of an old man with the body of a child, and to have dictated to him the religion and laws of his country. There were three national divinities.

"Each town had one national temple dedicated to the three great attributes of God—strength, riches, and wisdom—or Tina, Talna, and Minerva. The Etruscans acknowledged only one supreme God, but they had images for his different attributes, and temples to these images; but it is most remarkable that the national divinity was always a triad under one roof; and it was the same in Egypt, where one supreme God alone was acknowledged, but was worshipped as a triad with different names in each different Nome."—P. 147.

The state religion, afterwards adopted at Rome, was derived from Etruria, where the different classes of augurs were kept up in full perfection; the placing these offices in the hands of an hereditary nobility, and the control over the national assemblies possessed by the augurs, who alone could take the auspices and interpret the omens, was a state-craft of Etrurian origin. Their knowledge of science, which was carefully treasured from the vulgar, greatly assisted these operations. They are believed to have understood the electric agency of lightning; and this appearance, according to its being in one part of the heavens or another, circumstances over which they seem to have had full control, was a favorable or unfavorable omen. They alone of the people in Italy understood how to obtain fire from heaven by means of burning-glasses, and thus rekindle the sacred flame which was in the custody of the Vestal Virgins. This was an Etruscan institution, and our authoress supposes the first Vestal to have been the sister of Tarchon. From this, she concludes, that her hero introduced into European society the principle of rendering honor to women, and the making imperative for them such an education as shall fit them to maintain that honor. "A principle," she says, "which alone can give stability to civilization. Where women are educated, men must be manly and society must be refined." The custom of admitting females to the banquets and public feasts, she also considers to have arisen from this characteristic principle of the Etruscans.

The king of the nation appears to have been elected at the assembly of the people, which took place yearly at Castel d'Azzo; where the public business of the nation, as well as its traffic, was carried on at their annual fair. This national cemetery was, as we have already stated, their place of national assembly. Their Westminster Abbey was close to their Houses of Parliament. The people generally were under the control of hereditary princes or chiefs, who had large tracts of land assigned to them and the people over whom they ruled. It was a kind of clanship;—the very word, according to Mrs. Gray, being Etruscan. The principle of their connexion was not feudal but patriarchal. It was the same principle that once prevailed in the Highlands of Scotland and in Ireland, though always opposed by the Norman laws, and never recognized. She tells us that the chief was the governor, judge, general, and prince of his people. The clansmen labored for him, traded for him, and fought for him. They paid his debts, if poor; ransomed him, if a prisoner; and followed him into banishment, if exiled. A colony animated with such principles and under such leaders, was sure to succeed. Under the name of Patron and Client this system is found in Rome; at least, in the earlier ages of the Republic; afterwards a middle class arose, with the extension of conquest and commerce and the use of a standing army, and this being unconnected with the aristocracy by any ties of blood or clanship, the real principle was abolished, whilst the name, perverted and abused, was retained.

Religion was mixed up with all the actions of the Etruscan. We must here use our authoress's own language.

"All the ancient legislators rested their systems upon a religious structure, and strove to found the institutions of time upon the basis of eternity. Hence they inculcated all the natural and civil obligations of social life as emanations of the divine will, and such they held to be every sentiment of patriotism, and every exhibition of public courage. The state ritual taught each man his rights and duties, and the prescribed line of his public and private conduct, as that which was pointed out for him by the gods. No one was suffered by Tages to separate from religion the interests of his country, the inspirations of human genius, or the purposes of human rectitude. No one was allowed to consider the world as the ultimate object of his hopes and desires,

and far less was he permitted to regard the applause of his fellow-creatures, or his own self-interest, as the measure of his actions, or the ruling principle of his understanding. The will of the gods was, from early education, every thing to the Lucumo, and ever present to his imagination. He consulted that will by sacrifice, when he first took his seat in the senate, and when he delivered his opinion there; when he married, when he put out to sea, when he went forth to battle, when he sowed and when he reaped, when he planted and when he gathered in, when he increased his estate and when he diminished it. He sacrificed when he desired to atone for his offences, or to satiate his vengeance; to endure manfully loss and disappointments, or to triumph over his foes. He sacrificed and took auspices as a bounden duty, to moderate his exultation in prosperity, to alleviate his sufferings in adversity, to guide his active career, and to cheer his dissolution."—P. 266.

The depositories of the religion of the Etruscans were also, as we have hinted, the depositories of their science, and the arts of life; and they were the princes of the people. This explains the origin of the vast architectural remains to which we have before alluded. The influence thus exercised over the people by their governors, who were spiritual and temporal rulers, may explain, without calling in the labor of conquered or tributary nations, the construction of those great works, which mark the footsteps of the Eastern races. The walls of Babylon, the Pyramids of Egypt, the Cyclopean walls of Greece and Italy, and even the Druidical temples of England, are all types of the same national character, evidences of the same religious and political system which prevailed in Etruria. The people were kept in intellectual and moral, as well as physical subjection; the government held over them the terrors of the future, as well as the punishments of the present world.

Mrs. Gray dwells with praise upon the public works of the Etruscans,—made on a great scale, in a truly public spirit, for the poor as well as the rich. They were particularly skilled in hydraulics. It was part of their old Egyptian learning. The marshes adjoining the sea, now desolated by malaria, and the haunt only of the buffalo or the vulture, were then drained and cultivated. They covered the plain of the Campagna with fertility; the Cloaca Maxima at Rome, and the Emissario of Albano, were the work of Etruscan engineers. They are both constructed on the same large scale, and with the same gigantic stones, as the walls and gates we have before mentioned in connexion with the Pelasgi. Upper Italy, too, felt the benefit of their knowledge of science. They sent a colony into the plain of the Po. They constructed a scheme of draining and irrigation for the superabundant waters of that river. They drained the Delta of the same stream, and made a magnificent harbor. Thus they civilized Italy, to whose prosperity these arts were essential. Every enlightened ruler, every Italian reformer, has considered the drainage of its poisonous marshes the first step to improvement. But there seems a moral miasma impending over that devoted land, which unstrings the nerves and sinews of her national life, and almost forbids the hope of even partial amendment, without a moral and spiritual regeneration of her people.

Mrs. Gray has executed her task with good taste. She has given us a thread of ingenious theory to guide us through the mazes of conflicting traditions. Subject to the modifications we have suggested, it is perhaps as well founded as can be hoped for. Her work is instructive and well worth an attentive perusal: though it is often dry in the necessary details, yet there is frequently an analogy traced, or some kindred subject illustrated, which relieves the discussion. To judge of Mrs. Gray's merits as an interesting writer, one must wade through the mass of facts, and study the dry skeleton of results which the other historians of the early inhabitants of Italy have laid before their readers.

One or two points, however, in the execution of the work seem to require observation. There is a disposition to accept as facts, events supported by little evidence, and occasionally to use the results of a bold hypothesis, as stepping stones for farther theories, which is, perhaps, natural to such investigations. In our perusal, we have sometimes hardly felt ourselves so secure, as our guide seemed to be, that we were upon firm ground. Mrs. Gray places too much reliance on the philological metempsychosis, so fashionable among antiquaries; and she is very expert at transforming names, pronouncing these consonants to be radical, those to be superfluous, and vowels unnecessary. The blunders into which this had led some antiquaries, should be a warning to our authoress. She seems, for a disciple of Niebuhr, to place too much confidence in the ordinary chronology of those times. Nothing, in all this subject,

is more uncertain than the dates of events; there is not one that can be fixed with certainty in profane history, beyond the ninth century before our era.

We shall have much pleasure in seeing the conclusion of this work, the second part of which carries the history down to the expulsion of the Tarquins. But the last topic on which it is intended to dwell—the domestic manners and customs of the Etruscans—is one of delicacy and difficulty. Its details are far from being matter of unmixed satisfaction. The civilization of Etruria, like that of Greece and Rome, was the civilization of a heathen people. In those countries, progress of mind and refinement of intellect seem to have been applied to the taking from vice its proper features. Nay, the popular mind, at the period of most advanced civilization, deified vices. In Etruria, too, luxury and corruption doubtless produced their inevitable results. Though the unbridled license and unblushing wickedness with which the Etruscans have been charged by some ancient writers is, no doubt, grossly exaggerated, yet there are points upon which the admirers of this people have allowed themselves to dwell with praise, which disclose ground for these attacks. Babylonian customs were kept up. A Roman matron would have shrunk from the exhibition which we have ourselves observed on the walls of the tombs at Corneto, of ladies sharing public banquets, clothed in garments, the texture of which, when the luxury of the East had enslaved and corrupted the old Roman virtue, called forth the indignant remonstrances of the epicurean Horace, no less than the coarser lash of the stern Juvenal.

Other points in relation to the Etruscan manners, and particularly the mode in which some of their customs and habits have been handed down to us, are very interesting. Their works of art have been a model for all succeeding ages. Genuine lovers of beauty, they studied the graces of form rather than of color; and for exquisite outline, their vases and cups have never been surpassed. There is a strange permanency about these things. The same shape which owes its existence to the ingenuity of some Etruscan potter, is now the universal model for English ware; and from this commercial centre of the world, is sent to the remotest part. The patterns and borders which adorn the painted sepulchres of this people, seem to have been of universal use among the Romans, if we judge by the specimens found at Pompeii, and are now far more generally used than any other. The taste which is now discarding all other forms but those fashioned upon a Gothic model, and sets a value upon them for their supposed antiquity, is introducing an innovation of yesterday, compared with the patterns it supplants, which, invented in Etruria, have survived to us amid the varieties and changes of three thousand years.

TENNYSON'S POEMS.

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PERHAPS an admixture of caprice, and profound obscurity, and wilful singularity, has, in the instance of Tennyson, even added something to the reputation of a poet, of whom every candid reader must admit that he has written some of the most charming verses these later times have produced. It is good policy in an author, at least it is a fortunate circumstance for his immediate popularity, if, in companionship with sterling merits that may challenge the applause of severest judges, he can exhibit certain startling eccentricities that will attract the gaze and wonder of the crowd, and invest him, amongst superficial readers, with an air of undoubted originality. He thus bribes the wise, and wins the foolish. The applause of the judicious cannot, indeed, be long dispensed with; but the judicious are not the people who make much clamor in the world, and he whose object is renown, must, some way or other, gather the crowd about his heels.

There is no speedier way of doing this, than by affecting singularities which attract and amaze the ignorant. Besides which, there are many, by no means belonging to the ignorant class of mankind, who eagerly attach themselves to an author, in the admiration of whom they also can be a little bold and singular—who are pleased to be presented with certain eccentricities which they can either generously pardon or courageously adopt. There are those who, in literature as in life, choose, not the book or the friend whom they can thoroughly esteem, but rather some *pet* author, or pet companion, whom they are resolved, right or wrong, through good and ill repute, to side with and to admire. They are deter-

mined to show their free will in the distribution of their praise; nor are they ever so well pleased with their favorite genius, as when, throwing themselves manfully in the breach, they defend, explain, applaud all the affectations of which he is accused. These are they who, in our republic of letters, form those *coteries* who exert often so mysterious an influence in its affairs, and raise to so sudden an elevation the poet of the day. Advocates even of his weaknesses, they, at all events, must be supposed pre-eminently to appreciate his indisputable excellences. It will, at least, they think, be conceded, that to them above all others must be known where his strength really lies. A concession, which will not, perhaps, be universally granted. To us these admirers appear to imagine that all their heroes must resemble the miraculous champion of the Israelites, and that their strength must lie, not in bones and sinews, but in that loose, disordered hair which is hanging uncombed about their shoulders.

We have no idea of attributing to Mr. Tennyson a distinct premeditated policy in this conduct we have observed upon. On the contrary, it has sometimes occurred to us, that, in the varied licenses which some of our later poets have taken—in their disregard to established rules of composition—their wilful carelessness—their wanton play with language and metre—they have but yielded, though, perhaps, unconsciously, to the influence of a prosaic and practical age. In such an age, the maker of verse finds himself half ashamed of his vocation; and in order not to be thought to devote a disproportionate labor to what, after all, may be looked upon as a species of ingenious trifling, or, at best, an 'unproductive industry,' he throws aside, from time to time, the air of study and of toil, and attempts to give to his best and happiest efforts the appearance of hasty and spontaneous effusion. They are casual beauties, they—the natural wealth of the climate—gifts of the morning sun; if you think them valueless as summer dew-drops, they at least cost as little. Brush them away—you are welcome—to-morrow can sow the fields again with the same profusion of pearls—pearls which no diver has raked up, with care and agony, from the bottom of the seas. The extreme polish of verse, the slow progressive labor which 'lived along the line,' is suspected to be less honorable than heretofore. The artist is anxious to show that he does not, any more than others, over-estimate his curious workmanship; and therefore, having bestowed the most felicitous toil on one part of his canvas, he will strike the pencil carelessly over another, to prove that he is no weaker, no fonder than ourselves. At first, indeed, this off-hand, impromptu manner of writing, as if the poet yielded to the sudden, capricious, uncontrolled impulses of genius, would seem to denote a very different temper of mind, a bold reliance on his own powers, and on the favor of his audience. But, no; like the abrupt and startling manner of a bashful man, this audacity of the modern poet does but hide his timidity, is but a struggle against the painful feeling, that he, perhaps, is out of place, and in the presence of a society which gives but cold, ambiguous welcome, and which is more disposed to scoff than to admire.

That the poet, of all men the most sensitive, should be occasionally depressed by this sentiment of timidity, that he should, from time to time (as we gather even from the poems and prefaces of Wordsworth), have to reason himself into the conviction that his art is not an idleness, and his work not a mere superfluity of life—is natural enough. It is another question whether he is called upon to feel this sentiment of timidity, or doubt the utility of his calling. The more prosaic the age, the more need, say we, of him and of his tender or his lofty song. We cannot doubt that poetry has its distinct and very important office to perform in the world of letters. Without insisting that for a perfect culture of the mind it is necessary to become acquainted with a wide sphere of thought and feeling—even of thought not assented to and feeling not approved of—we may, taking the narrowest of all ground, safely contend that in the circle of pure and domestic affections, and of the natural sentiments of piety which man and nature inspire, a well selected poetry is of eminent advantage. Those who have given but slight consideration to the subject, have sometimes disputed its utility on the ground that, as it is with the real circumstances of life we have finally to deal, our feelings ought to be moulded by and for these, and not by fictions of the imagination. But it is exactly that the heart should be well attuned to the real circumstances of life that we desire, and it is exactly this that the better order of poetry assists in performing. Unhappily, the circumstances of real life, without collateral culture of the mind, rarely awaken all the feelings which they are fitted, and which they ought, to call

forth. What is the magical word *home* to a hard materialized nature, which seeks even in the domestic circle nothing but its own selfish gratification? The poet takes from the heart of better men, and diffuses over many, the tender, happy, and virtuous emotions, which, in their perfection, are felt spontaneously only by a few. It is not always, nor most frequently, a mere visionary scene that he reveals to us; he more often makes visible the beauty of that old familiar world which is lying disregarded around us. Even when his events are fantastical and supernatural, the feelings, it must be remembered, which he describes, are human, else his poem is indeed but a 'tinkling brass,' of which no account need be taken, it being powerless for good or for evil. That thoroughly English poet, Cowper, who drew his materials from the very fire-side by which he wrote, has he done nothing to extend the sentiments which he felt so warmly and described so well? Assuredly the poetry of *The Task*, like a sudden beam of light over some unpretending landscape, has brought out to many an eye the beauty and pathos of simple and domestic life. And, in our own day, does not the whole heart of England confess a new, a tender, a charitable and ennobling impulse from the verse of Wordsworth? He who makes two blades of grass to grow where one only grew before, has been regarded as pre-eminently the benefactor of his species, and elevated above conquerors and statesmen; is he far behind him in utility, (we like to use that term, for we also, after our own manner, claim to be utilitarians,) does he rank much below in the scale of serviceable men, who makes two blades of kindly feeling to grow where one only grew before?

Nor is it only in youth, and as a preparation for untried scenes that the pathos of poetry may render good service; it is well in manhood and old age to kindle the memory of kind and noble affections which *have been* felt. It has been said that 'the heart has no echo,' and some have added, 'except for its grief.' Certainly the finer joys pass rapidly across the mirror of the mind, and we need some powerful incantation to bring them back, and stay them there, if but for an hour. We need to be sometimes told that we *have* kindled with disinterested affection, that we *have* overflowed with that natural piety which the beauty of the earth calls forth, in order that the heart may be reassured, and know itself as still capable of these fine emotions. If familiarity blunts the most delicate susceptibilities of social life, literature may be said to supply an antidote to this ungracious influence. Every one has had occasion to experience, or to remark, how at the meeting of old friends, there suddenly gush upwards, as from hidden sources, many a tender feeling which had been choked up, or trodden down, or let run to waste. What a meeting after a separation is to an old friendship, such is oftentimes the perusal of a genuine and heart-stirring poet.

We have sometimes been tempted to smile at the charge brought with more gravity than reflection against poetry, that it kindles imaginary and too vivid anticipations of the happiness of life, and inspires hopes which our sober and toilsome world cannot realize. We have smiled, because we know well that it is quite an opposite accusation which the poetry, especially of our wind-beaten and wave-washed island has to sustain. From the tragedy of Hamlet, to the last lines we read in the magazine of the month—which prettily and plaintively congratulated a blind girl on this, at least, that she would never see the cold, averted glance of an alienated friend—the tenor of our poetry has been of a melancholy character, and its effect upon young and impassioned readers has been invariably to create more despondency than hope. Whilst it kindles the purest and happiest of *feelings*, it does not promise largely for their enjoyment; it mostly denies the consenting *circumstance*. It mingles before our eyes the elements of happiness—it dexterously presses the wine from out the grape; but, somehow, the bowl is ever broken; it falls to the earth, or is dashed from our hands. The treasures of life are revealed to us in the strains of disappointment; it is regret which ever sings of joy; it is her inverted torch which throws its light upon our path; it is a golden urn that is thrust into our bosom.

Jean Paul Richter, alluding to the melancholy influence of poetry upon youth, compares it to the black veil which travellers are advised to wear on their first entrance amongst the snow-bright mountains of Switzerland, to protect the else dazzled eye-sight. When the landscape has grown familiar to the traveller—when life to the youth—the black veil, in either case, may be laid aside; it will no longer be necessary, nor likely to be retained. The apology conveyed in this fanciful illustration is the best that can be offered; but we are not sure that

we should accept it as quite satisfactory. We are disposed to think that, to some extent, it *is* an evil that our first efforts at reflection should be awakened and accompanied by sentiments of sadness and despondency. Every good thing of this earth, has, however, some attendant evil, and this is one which, in general, the stir and manifold activity of life easily encounters and dispels.

No; the task of the poet is not a busy idleness, nor is it in vain, or without a purpose, that an unconquerable impulse to pour forth his inmost soul in the highest and most impressive forms of language, has been implanted within him. We have, in obedience to a very prevalent mode of speech, called our own a prosaic age, and in one sense of the term it may be so described; but we do not regard it, on the whole, as averse to poetry. The writers who appear as candidates for applause, are, we suspect, (with very few exceptions,) not worthy of the age, and for this reason obtain so little notice. Certainly, the great masters of poetry were never more read, or better appreciated than they are at the present time. Shakspeare was never more admired, nor Milton more revered. We are not less open than at any former period to the sublimest strains, to the deepest pathos, to the tenderest fancies of the poet; we, perhaps, demand more than ever that he be pre-eminently poetical—passionate, imaginative, creative. In one sense only can we be justly called prosaic. We have no reverence for verse, for its own sake; we set no value on dexterous artifices of language; have little esteem for "difficulties conquered," and similar claims to our admiration. What can be best said in prose, we desire should be said in prose. Poetry, in fine, has lost nothing; but versification has lost much. We still require it to be good, and yet bestow little honor on it. We regard its excellence as a sort of negative virtue. Nor do we care to see it so often as heretofore. Over a wide range of topics, the decree has gone forth in favor of plain prose, which has withal an abundance of simple and natural harmonies of its own. We are far from asserting that the line has been distinctly drawn between the subjects which are and are not adapted to the forms of poetry. The boundary line may still be as vague as ever; we know only that it has moved. We can pronounce that the tide has advanced or receded, although to trace, upon a bold shore, the exact demarcation between sea and dry land, remains, at all times, equally difficult. If, for instance, Akenside were now living, we may be sure he would not write a philosophical theory of the sublime and beautiful in blank verse. No Pope or Boileau would now convert rules of criticism into materials for a poem; as if because they related to poetry, they must be themselves of a poetical character. To blunderers, of course, no limits can be set; it is their peculiar privilege to overleap all bounds; and therefore, in these days of agricultural improvement, some one *may* bethink him of reviving a bucolic strain, and teaching the farmers how to plough, and sow, and drain their lands in very elaborate hexameters, but we may be sure that this will not be the Virgil of his age.

Mr. Tennyson—to return to the author whose works have led us to this train of remark—in the two small volumes in which his poetry is comprised, may be said to have exemplified whatever is characteristically good or vicious, in the most modern school of poetry: we have its delicacy of touch, its subtlety of imagination, its fineness of vision; we have, too, its carelessness, its obscurity, its metaphysical vagueness, accompanied occasionally with the very opposite fault of puerility.

It is, we believe, the more approved custom of our critical brotherhood to expose the faults, in the first place, and afterwards to reveal the merits of their author; to exhaust first the arrows of censure, and then to pour in the balm of praise. Whatever advantage this order may possess, we shall reverse it on the present occasion. While the ear of our reader is fresh, and before he is thrown by any criticism of ours into a too prying and suspicious temper, let us present him with some strains of exquisite poetry; such as, if he has not encountered them before, he shall thank us for having brought under his notice. We shall be rather liberal in our quotations from this author, on the presumption that his writings have not circulated extensively amongst the class who constitute a large portion of our readers. Nor are they likely, perhaps, to do so. Although containing nothing hostile to Christianity, and indeed exhibiting occasionally a strong religious feeling, the sentiments are of too miscellaneous a character altogether to awaken strong interest in that order of thinkers, who do not merely admit Christianity to a place in the *circumference*, but establish it in the very *cen-*

tre of their intellectual horizon, thence to radiate its light on all topics that pass under review. If any of our readers should be induced, after perusal of this notice, to refer to the poems themselves of Mr. Tennyson, they must not be surprised if they find we have left very little behind of a character to interest them.

Our first quotation shall be from *The Lotos Eaters*. Ulysses and his companions enter the land of the lotos—

'a land
Where all things always seem the same,'

and eat of the fruit which disposes to languor, and inaction, and deep repose.

'They sat them down upon the yellow sand,
Between the sun and moon, upon the shore;
And sweet it was to dream of fatherland,
Of child, and wife, and slave; but evermore
Most weary seemed the sea, weary the oar,
Weary the wandering fields of barren foam.
Then some one said, 'We will return no more;'
And all at once they sang, 'Our island home
Is far beyond the wave; we will no longer roam.'

CHORIC SONG.

'There is sweet music here, that softer falls
Than petals from blown roses on the grass,
Or night-dews on still waters between walls
Of shadowy granite, in a gleaming pass;
Music that gentlier on the spirit lies,
Than tired eyelids upon tired eyes;
Music that brings sweet sleep down from the blissful skies
Here are cool mosses deep,
And through the moss the ivies creep,
And in the stream the long-leaved flowers weep,
And from the craggy ledge the poppy hangs in sleep.

'Why are we weighed upon with heaviness,
And utterly consumed with sharp distress,
While all things else have rest from weariness?
All things have rest, why should we toil alone?
We only toil who are the first of things,
And make perpetual moan,
Still from one sorrow to another thrown:
Nor ever fold our wings,
And cease from wanderings;
Nor steep our brows in slumber's holy balm;
Nor hearken what the inward spirit sings—
"There is no joy but calm!"
Why should we only toil, the roof and crown of things?

'Lo! in the middle of the wood,
The folded leaf is wooed from out the bud,
With winds upon the branch, and there
Grows green, and broad, and takes no care,
Sun-steep'd at noon, and in the moon
Nightly dew-fed; and, turning yellow,
Falls, and floats adown the air.
Lo! sweeten'd with the summer light,
The full-juiced apple, waxing over-mellow,
Drops in a silent autumn night.
All is allotted length of days,
The flower ripens in its place,
Ripens, and fades, and falls, and hath no toil,
Fast rooted in the fruitful soil.

'Hateful is the dark-blue sky,
Vaulted o'er the dark-blue sea;
Death is the end of life—ah! why
Should life all labor be?
Let us alone. Time driveth onward fast,
And in a little while our lips are dumb.
Let us alone. What is it that will last?
All things are taken from us, and become
Portions and parcels of the dreadful past.
Let us alone. What pleasure can we have
To war with evil? Is there any peace
In ever climbing up the climbing wave?
All things have rest, and ripen toward the grave—
In silence, ripen, fall, and cease:
Give us long rest or death, dark death, or dreamful ease!

'How sweet it were, hearing the downward stream,
With half-shut eyes ever to seem
Falling asleep in a half dream!
To dream a dream, like yonder amber light,
Which will not leave the myrrh-bush on the height;
To hear each other's whispered speech;
Eating the lotos, day by day,
To watch the crisping ripples on the beach,
And tender curving lines of creamy spray:
To lend our hearts and spirits wholly
To the influence of mild-minded melancholy;
To muse, and brood, and live again in memory,
With those old faces of our infancy,
Heaped over with a mound of grass,
Two handfuls of white dust, shut in an urn of brass!

'Dear is the memory of our wedded lives,
And dear the last embraces of our wives,
And their warm tears: but all hath suffered change;
For surely now our household hearths are cold:
Our sons inherit us; our looks are strange;
And we should come like ghosts to trouble joy.
Or else the island princes, over bold,
Have eat our substance, and the minstrel sings
Before them of the ten years' war in Troy,
And our great deeds, as half forgotten things.
Is there confusion in the little isle?
Let what is broken so remain.
The gods are hard to reconcile:
'Tis hard to settle order once again.
There *is* confusion worse than death,
Trouble on trouble, pain on pain,
Long labor unto aged breath,
Sore task to hearts worn out with many wars,
And eyes grown dim with gazing on the pilot stars.

* * * * * * *

We have had enough of action and of motion, we
Roll'd to starboard, roll'd to larboard, when the surge was seething free,
Where the wallowing monster spouted his foam fountains in the sea.
Let us swear an oath, and keep it with an equal

mind,
In the hollow lotos-land to live and lie reclined
On the hills, like gods together, careless of mankind.'

It is no objection to this charming little poem, but an additional merit, that it is not necessary to have eaten of the lotos to sympathize with the strain of feeling which it so beautifully describes.

From the poems of Mr. Tennyson might be selected quite a little gallery of female portraits, all distinguished for their grace and purity. We will present our readers with a glance of the chief of them. First in order is the young and laughing *Lilian:*

'Airy, fairy Lilian,
Flitting fairy Lilian,
When I ask her if she love me,
Claps her tiny hands above me,
Laughing all she can;
She'll not tell me if she love me,
Cruel little Lilian'

Next we have the wifely *Isabel:*

'An accent very low
In blandishment, but a most silver flow
Of subtle-paced counsel in distress,
Right to the heart and brain, though undescried,
Winning its way with extreme gentleness
Through all the outworks of suspicious pride.'

Of *Madeline* we shall report nothing but her—

'Delicious spites and darling angers.'

The mystic *Adeline* must not be so briefly dismissed. Who has not, at least when his eyesight was very young, encountered some fair lady whose visual orbs seemed to be full of some profound, sweet melancholy, some super-terestrial meaning, which he in vain essayed to penetrate? In after-years we probably solved the riddle in a very cold and sceptical manner, concluding that, whatever beauty there might have been in those eyes, there was no peculiar *thought* of any kind—that, in fact, there was no meaning to divine, and this mysterious semblance of thought was but the play of our own imagination. This most prosaic explanation, we must, however, for the present dismiss, and listen to the fanciful conjectures of the poet:

ADELINE.

'Mystery of mysteries,
Faintly smiling Adeline,
Scarce of earth, nor all divine,
Nor unhappy, nor at rest;
But beyond expression fair,
With thy floating flaxen hair.
Thy rose lips and full black eyes
Take the heart from out my breast:
Wherefore those dim looks of thine,
Shadowy, dreaming Adeline?

'What hope, or fear, or joy is thine?
Who talketh with thee, Adeline?
For sure thou art not all alone:
Do beating hearts of salient springs
Keep measure with thine own?
Hast thou heard the butterflies
What they say betwixt their wings?
Or in stillest evenings,
With what voice the violet woos
To his heart the silver dews?
Or, when little airs arise,
How the merry blue-bell rings
To the mosses underneath?
Wherefore that faint smile of thine,
Shadowy dreaming Adeline?

'Some honey-converse feeds thy mind,
Some spirit of a crimson rose
In love with thee forgets to close
His curtains, wasting odorous sighs
All night long on darkness blind.
What aileth thee? whom waitest thou
With thy soften'd, shadow'd brow,
And those dew-lit eyes of thine,
Thou faint smiler, Adeline?'

Adeline has, it seems, a sister *Margaret*, who holds no such mysterious communion with roses and violets—whose sympathies are more human; but whose portrait is, nevertheless, worth studying.

MARGARET.

'From all things outward you have won
A tearful grace, as though you stood
Between the rainbow and the sun.
* * *
'You love, remaining peacefully,
To hear the murmur of the strife,
But enter not the toil of life.
You are the evening star, alway
Remaining betwixt dark and bright:
Lull'd echoes of laborious day
Come to you, gleams of mellow light
That float by you in the verge of night.

'A fairy shield your genius made
And gave you on your natal day;
Your sorrow only sorrow's shade,
Keeps real sorrow far away.
You move not in such solitudes,
You are not less divine,
But more human in your moods
Than your twin sister Adeline.
Your hair is darker, and your eyes
Touched with a somewhat darker hue,
And less aerially blue;
But ever trembling through the dew
Of dainty—woful sympathies.'

Of the serene, imperial *Eleänore*, we have only room to quote the following lines.

They form in themselves an exquisite little picture :—

'His bow-string slackened, languid Love,
Leaning his cheek upon his hand,
Droops both his wings regarding thee,
And so would languish evermore,
Serene, imperial Eleänore.'

St. Simeon Stylites is a poem of a very different and sterner character from any we have hitherto referred to. It is a portraiture, we need hardly say, of that unfortunate enthusiast, who, thinking to win Heaven by inflicting tortures upon himself, at length contrived to live day and night upon the narrow summit of a high pillar. Such fanatics as Simeon have their places, it is true, in the history of Christianity, but their monstrous penances are rather to be attributed to the previously current superstitions of the East, which intruded themselves into Christianity, than to any perversions, however extraordinary, of the doctrines of our religion. At all periods, indeed, many excellent but mistaken men have thought to earn tranquillity and peace of mind by inflicting pain and privation upon the body. They might almost as reasonably have reversed the experiment, and hoped to secure health of body by torturing the mind. But it was no mistake of this description, which such fanatics as Simeon made. Peace and tranquillity of mind were not amongst the objects they were in search of. These *Christian Fakirs* held that so much torture was so much merit, and was entitled to so much recompense. It was present agony paid for future joy in paradise. Our poet has presented us with a faithful sketch of this fanatical spirit, with its alternate exultation and despondency, its fluctuations between egregious pride and utter prostration of mind, together with its moments of mental wandering and self-bewilderment. Here is a brief specimen :—

'But yet,
Bethink thee, Lord, while thou and all the saints
Enjoy themselves in Heaven, and men on earth
House in the shade of comfortable roofs,
Sit with their wives by fires, eat wholesome food,
And wear warm clothes, and even beasts have stalls,
I, 'tween the spring and downfall of the light,
Bow down one thousand and two hundred times
To Christ, the Virgin Mother, and the saints;
Or in the night, after a little sleep,
I wake; the chill stars sparkle; I am wet
With drenching dews, or stiff with crackling frost.
I wear an undress'd goatskin on my back;
A grazing iron collar grinds my neck;
And in my weak, lean arms I lift the cross,
And strive and wrestle with thee till I die:
O mercy, mercy! wash away my sin.

'O Lord, thou knowest what a man I am;
A sinful man, conceived and born in sin:
'Tis their own doing; this is none of mine;
Lay it not to me. Am I to blame for this,
That here come those that worship me? Ha! ha!
They think that I am somewhat. What am I?
The silly people take me for a saint,
And bring me offerings of fruit and flowers,
And I, in truth (thou wilt bear witness here,)
Have all in all endured as much, and more
Than many just and holy men, whose names
Are register'd and calendar'd for saints.

'Good people, you do ill to kneel to me.
What is it I can have done to merit this?
I am a sinner viler than you all.
It may be I have wrought some miracles,
And cured some halt and maim'd. But what of that?
It may be, no one, even among the saints,
May match his pain with mine. But what of that?
Yet do not rise: for you may look on me,
And in your looking you may kneel to God.
Speak! is there any of you halt or maim'd?
I think you know I have some power with Heaven
From my long penance: let him speak his wish.'

We willingly turn from this gloomy portraiture to something of a gayer strain, which we shall not have long to seek for amongst the poems of this author. *The Talking Oak* is a charming production. If the trees should take to talking in this style, mere human tongues may give up the trade. But we feel that if we meddle with this discourse of the talking oak, we must quote it all. There are some poems the merit of which cannot be made known by any extracts, however partially selected; so little does the charm lie in this or that verse, but in the grace diffused over the whole. If any one, after having been delighted by a piece of this description, wishes to make his friend participate in his admiration, he is surprised at the difficulty he finds in fixing upon a passage which will justify his applause. The beauty of the poem seems to evaporate when he reviews it verse by verse. He begins to suspect that he himself had strangely overrated its merit. Just such a piece is *The Talking Oak*. Therefore we will pass it by, and select in preference some passages from *The Day Dream*.

This is an elegant recital of a fairy legend, which tells how a king, with all his court, and all the inmates of his palace, were drowned in deepslumber for a hundred years —how a thick tall hedge grew round the palace, and hid it from all intruders—how his daughter, the princess, lay in her apart-

ment alone in the same deep sleep—and how at the end of the hundred years, a prince, led by a benevolent fairy to the spot, dissolves the charm by imprinting a kiss on the fair sleeper, whom he thereupon, as in due course of all such narratives, claims for his bride. Here is the picture of the hall, where the king and his court hold perforce their 'permanent sitting.'

'Roof-naunting martins warm their eggs:
In these, in those, the life is stay'd.
The mantles from the golden pegs
Droop sleepily: no sound is made,
Not even of a gnat that sings.
More like a picture seemeth all
Than those old portraits of old kings,
That watch the sleepers from the wall.

'Here sits the butler, with a flask
Between his knees half-drain'd; and there
The wrinkled steward, at his task;
The maid of honor blooming fair:
The page has caught her hand in his:
Her lips are sever'd as to speak:
His own are pouted to a kiss:
The blush is fix'd upon her cheek.

'Till all the hundred summers pass,
The beams, that thro' the oriel shine,
Make prisms in every carven glass,
And beaker brimm'd with noble wine.
Each baron at the banquet sleeps,
Grave faces gather'd in a ring.
His state the king reposing keeps,
He must have been a jolly king.'

Alone in an inner apartment sleeps the princess:—

'Year after year unto her feet
—She lying on her couch alone—
Across the purpled coverlet,
The maiden's jet-black hair has grown,
On either side her tranced form
Forth streaming from a braid of pearl:
The slumbrous light is rich and warm,
And moves not on the rounded curl.

'She sleeps: her breathings are not heard
In palace chambers far apart.
The fragrant tresses are not stirr'd
That lie upon her charmed heart.
She sleeps: on either hand upswells
The gold-fringed pillow lightly pressed:
She sleeps, nor dreams, but ever dwells
A perfect form in perfect rest.'

But at length the prince and the good fairy arrive.

'A touch, a kiss! the charm was snapt.
There rose a noise of striking clocks,
And feet that ran, and doors that clapt,
And barking dogs, and crowing cocks.
A fuller light illumined all,
A breeze through all the garden swept,
A sudden hubbub shook the hall,
And sixty feet the fountain leapt.

'The hedge broke in, the banner blew,
The butler drank, the steward scrawl'd,
The fire shot up, the martin flew,
The parrot scream'd, the peacock squall'd,
The maid and page renew'd their strife,
The palace bang'd, and buzz'd, and clackt,
And all the long pent stream of life
Dash'd downward in a cataract.

'And last of all the king awoke,
And in his chair himself uprear'd,
And yawn'd, and rubb'd his face, and spoke,
'By holy rood, a royal beard!
How say you? we have slept, my lords;
My beard has grown into my lap.'
The barons swore with many words,
'Twas but an after-dinner's nap.

''Pardy,' returned the king, 'but still
My joints are something stiff or so.
My lord, and shall we pass the bill
I mention'd half an hour ago?'
The chancellor, sedate and vain,
In courteous words return'd reply;
But dallied with his golden chain,
And smiling put the question by.'

Then the prince and the princess whom he has released from her trance by a ceremonial so much more simple and agreeable than dealers in magic usually prescribe, leave the palace in great happiness together. To this little tale is appended, by way of 'moral,' some lines which are worth quoting, as well for the meaning they convey, as for the felicity with which that meaning is expressed. It is undoubtedly true, as the fact intimates, and should be held in remembrance by all critics, especially of the severer order, that the exposition of the beautiful alone, without further object, is a distinct and legitimate aim of the art of poetry as well as of sculpture or painting, and is not without its beneficent influence.

MORAL.

'So, Lady Flora, take my lay,
And if you find no moral there,
Go, look in any glass, and say,
What moral is in being fair.
Oh, to what uses shall we put
The wild-weed flower that simply blows?
And is there any moral shut
Within the bosom of the rose?

'But any man that walks the mead
In bud, or blade, or bloom may find,
According as his humors lead,
A meaning suited to his mind.
And liberal applications lie
In Art like Nature, dearest friend;
So 'twere to cramp its use, if I
Should hook it to some useful end.'

Mr. Tennyson has been much complimented by his critics on his descriptive powers. He is frequently, without a doubt,

extremely happy in his expressions. He has very many lines and phrases of remarkably graphic power. But at the risk of being deemed fastidious, we will venture on this objection, that the circumstances which he seizes upon in his descriptions often appear to have been sought after with effort; they are not such as would spontaneously suggest themselves to the imagination; and consequently the reader has a similar effort to make, in putting these materials together to form a picture for himself. They have the air of having been torn and wrenched from their place; they could not be described in the language of another poet as being—

'The harvest of a quiet eye.'

Mariana has often been quoted as a remarkable instance of Mr. Tennyson's power to paint a scene. Without denying its merits, we confess it does not altogether please us. To us the description is marred by the violent effort to describe. The writer does not appear to stand in singleness of mind before his object, and looking at it with his heart in his eyes, as is the manner of poets, record what he sees; he rather seems to pry curiously about it in quest of poetic circumstance. Here is the commencement of the poem, and we do not think we could make a more favorable extract.

MARIANA.

'Mariana in the moated grange.'—*Measure for Measure.*

'With blackest moss the flower-plots
Were thickly crusted, one and all,
The rusted nails fell from the knots
That held the peach to the garden-wall.
The broken sheds look'd sad and strange,
Unlifted was the clinking latch,
Weeded and worn the ancient thatch
Upon the lonely moated grange.
She only said, 'My life is dreary,
He cometh not,' she said;
She said, 'I am aweary, aweary;
I would that I were dead!'

In this there are, without doubt, very graphic touches, but we feel ourselves abruptly plunged amongst details, which we have to put together for ourselves in the best manner we are able. An effect is produced as if the several objects had been cut out of a picture; and the brilliant fragments were thrown at hap-hazard before us.

The Lady of Shalott is another poem often cited with great applause by the professed admirers of Mr. Tennyson, and which we like still less. Together with a series of descriptions which have the same air of abruptness, and which bring with them the same uncomfortable feeling of effort, we have a story so obscurely told, that we would on no account take upon ourselves the responsibility of giving the briefest summary of it. We confess ourselves simple and prosaic enough, wherever there is anything like a story, to wish, like the children, to know *what it is about*. It is no answer to say, that there is magic and mystery in it, and that it deals with the supernatural. A fact may be as miraculous or as monstrous as you please, it is still a fact, and should be intelligibly narrated. The enchantments of the Arabian Nights are as distinctly told as the tamest incidents of a domestic novel. If it had been otherwise, they would never have gained the ear of the world as they have done. Even where the story is incomplete, where the events are unexplained, and it is the very purpose of the writer to leave us with a feeling of unsatisfied curiosity, still so much of the narrative as is intended to be communicated, should be communicated distinctly. We should know what it is that constitutes the marvel, what it is that remains to be explained; we must see plainly some portion of the thread, if only to perceive that it breaks off. The poem is written, too, in a style of versification which to us is extremely disagreeable. But to make our objection on this head intelligible, we must quote two of the stanzas.

THE LADY OF SHALOTT.

'On either side the river lie,
Long fields of barley and of rye,
That clothe the world and meet the sky;
And through the field the road runs by
To many-tower'd Camelot;
And up and down the people go,
Gazing where the lilies blow
Round an island there below,
The island of Shalott.

'Willows whiten, aspens quiver,
Little breezes dusk and shiver
Through the wave that runs for ever
By the island in the river,
Flowing down to Camelot.
Four gray walls and four gray towers
Overlook a space of flowers,
And the silent isle imbowers
The Lady of Shalott.'

And so on, through the whole poem, the first part of the stanza ending with 'Camelot,' and the second with 'The Lady of Shalott,' or 'Island of Shalott,' terminations which do not even form a rhyme; though perhaps we have no right to com-

plain of the want of rhyme, there being in the first part of each verse no less than four lines jingling together. A *refrain* of this description may have its appropriate place in a song of two or three verses; but when persevered in throughout a poem of some length, it becomes intolerable. The attention is perpetually called off from the poem itself, to watch how the writer brings in his invariable endings of 'Camelot,' and 'Lady of Shalott.' It is as if in travelling along some highway, whatever might be the interest of the scene over which the broad day was pouring, we were compelled by some ridiculous fascination to watch the recurrence, at stated intervals, of the tall, empty lamp-posts that stand beside the road, and so journey on from post to post, incessantly on the look out for what we feel to be the absurd object of an involuntary curiosity. We would as willingly be sent back to read acrostics, or study anagrams, or peruse those pretty little poems that were written in long and short lines, so dexterously arranged as to imitate the wings of Cupid, either folded or outspread, as best accorded with the sentiment.

Having alluded to this subject of versification, we may as well insert here a remark which Mr. Tennyson must have provoked from every one who has an ear for the music of verse. He is fond of making experiments in versification, and in order to obtain a novel *measure*, he occasionally sacrifices that *melody* which is the very essence of all metre, and which, even in prose, is found to be the natural companion of all pathetic language. No prose, we are sure, could be produced more rough and more jarring to the ear than some of Mr. Tennyson's experimental verse. We venture to say that, even in the language of conversation, no one ever puts together such jerking, jolting, unmodulated diction as may be found in the following example. It is the second verse of a piece entitled 'A Song,' a very plain misnomer, since there is scarcely a musical line in the whole composition:

'The air is damp, and hush'd, and close,
As a sick man's room when he taketh repose
An hour before death;
My very heart faints, and my whole soul grieves
At the moist rich smell of the rotting leaves,
And the breath
Of the fading edges of box beneath,
And the year's last rose.
Heavily hangs the broad sunflower
Over its grave i'the earth so chilly;
Heavily hangs the hollyhock,
Heavily hangs the tiger-lily.'

On this subject of versification it may be worth while to observe that it is evidently the tendency of our best modern writers to adopt in verse the same manner of pronouncing and spelling all words as is usual in prose; and, as it seems to us, with very good reason. As the termination (ed) of our participle is never, or rarely, pronounced, we cannot understand why it should be thought necessary, in metrical compositions, to spell it with the mark of elision. In the first line, for instance, of the above extract, why should it not be written *hushed*, as well as *hush'd?* No one would ever think of pronouncing this as a word of two syllables, unless constrained to do so by some caprice of the versifier. So, too, if the final vowel in the article *the*, when followed by a word commencing also with a vowel, is so faintly pronounced as not to constitute a separate syllable, we may safely leave it standing; there is no necessity to write it thus, *th'*, in order to put us in mind of a rapid pronunciation, which we should naturally adopt. Neither does this orthography truly represent the pronunciation it would intimate, for the vowel, though faintly and rapidly sounded, is not entirely dropped. In such a line as this of Milton's,

"Whom thus the angelic Virtue answered mild,"

no one feels the least redundancy, yet no one would pronounce it,

"Whom thus *th' angelic*," &c.

A verse is not a verse because it is made *to count;* it must be a verse to the ear, and that without any torturing of the language. Still less can we approve of such an abbreviation as the following—

"Over its grave *i' the* earth so chilly."

No one living leaves out the consonant in the monosyllable *in*. Examples cited from the older poets, in whose time, no doubt, the word was occasionally pronounced in this manner, cannot justify a recurrence to the practice now, when such a pronunciation would be considered either a vulgarity or an affectation. Poetry should surely employ the best English that is spoken, and not, in the exigencies of metre, have recourse to what, out of verse, would be censured as a vicious, slovenly, or pedantic pronunciation. Usage may, in some instances, sanction a departure from the ordinary orthography and pronunciation of

prose; but these instances should be restricted, and not multiplied. Common sense tells us that a poet can gain nothing, and may sacrifice much, by calling our attention to petty singularities of language, or by manufacturing his line out of what, at best, are the admitted artifices of the distressed versifier.

We perceive that we have veered round imperceptibly to the cold and windy side of the hill, and must now proceed with our strictures and censures upon our author. This is a part of our critical function, to us by no means the most agreeable. We would rather occupy the remaining space we can devote to Mr. Tennyson, in culling out the admirable passages of his works. But it is a review, an estimate of the poet, we have undertaken, and not the more pleasing and easy task of selecting 'elegant extracts.' We have already intimated that Mr. Tennyson shares in the two prevalent and very different failings of modern poetry; on the one hand, trifling with its reader by its negligence, caprice, and puerility; and, on the other, losing itself in obscurity by vain efforts at philosophical profundity, or over subtle imaginations.

What could Mr. Tennyson propose to himself when he presented to adult readers two such songs, for instance, as these to the owl? We quote them down below in a note.* They are unavailing, even as nursery rhymes. They have the requisite freedom from meaning, but the phrase is too learned; they lack that coaxing simplicity of language which wins the immortality of the nursery. Is it enough to say of such verses that they are imitations of certain antique specimens, found preserved, perhaps, in Shakspeare and others of the elder dramatists, which themselves have no possible interest apart from their antiquity, or the use made of them by these poets? Is it very wise or profitable to be manufacturing modern antiques, whose best recommendation is a very indifferent imitation of rust? Or is this a specimen of that rejuvenescence of our literature, which, according to some, took place on the revived study of the Percy Ballads?

So much has been written on this matter of abused simplicity in the various reviews of the poetry of Wordsworth, who chose to veil his genius occasionally under a very peculiar affectation; and the subject appears to be now so generally understood, that we shall not here enlarge upon it. We shall content ourselves with relating a little German fairy tale, which may not inaptly illustrate this species of literary rejuvenescence.

In those olden times, when the marvels of witchcraft and alchemy put to the blush the wonders of our modern chemistry, a certain mysterious damsel had concocted for herself the elixir of youth. Whenever she detected the least inroad of time upon her beauty, she had recourse to this liquid, and a few drops immediately repaired the damage. A handmaid who waited on her, at length discovered the secret of her perpetual freshness. She, too, had a few years, or a few wrinkles, that she would gladly lay aside. One day, in the absence of her mistress, she stole into her chamber, and seized the precious liquid; but in her eagerness to be again restored to perfect youth, she took so large a draught that she found herself suddenly dwindled—to a little child! She had drunk herself back to infancy, and stood there—like some of our modern poets—in lamentable conviction, at once, and punishment, of her fault.

But it is in the somewhat contradictory error of a profound obscurity that Mr. Tennyson more frequently offends. To metaphysics, in metaphysical garb, we willingly address ourselves with all becoming patience. We are prepared for difficulties, and do not shrink from their encounter. But here, in poetry, in what should be the

* 'When cats run home, and light is come,
And dew is cold upon the ground,
And the far-off stream is dumb,
And the whirring sail goes round,
And the whirring sail goes round;
Alone, and warming his five wits,
The white owl in the belfry sits.

'When merry milkmaids click the latch,
And rarely smells the new-mown hay,
And the cock hath sung beneath the thatch
Twice or thrice his roundelay,
Twice or thrice his roundelay;
Alone, and warming his five wits,
The white owl in the belfry sits.

'Thy tuwhits are lull'd, I wot,
Thy tuwhoos of yesternight,
Which upon the dark afloat,
So took echo with delight,
So took echo with delight,
That her voice untuneful grown,
Wears all day a fainter tone.

'I would mock thy chaunt anew;
But I cannot mimic it;
Not a whit of thy tuwhoo.
Thee to woo to thy tuwhit,
Thee to woo to thy tuwhit,
With a lengthen'd loud halloo,
Tuwhoo, tuwhit, tuwhit, tuwhoo-o-o.'

luxury of letters, to be confounded by obscurities which, at all events, in depths of shadow might rival the chapters of Kant or Hegel—it is too much. After having read on, with due attention, to the end of a poem, to have deliberately to recommence, to analyze, to apply as many tests as a chemist in order to discover some meaning in it—this, we say, is a grievance of which we have just right to complain. Perhaps, at length, we detect some glimpse of meaning, some vague general idea, which when we attempt to express in our own humble prose, looks very like an old acquaintance, whom there was no necessity to disguise in so much mummery. And be the idea new or old, what is to be said of that exposition of a truth which first presents you something as a riddle to be guessed at, and when that something is divined, leaves you without a shred of appropriate language to invest it with—leaves you, in fact, to huddle it up, after all, in whatever coarse vesture of your own may first come to hand?

To show the dark, perplexed, absurd manner in which our poet, elsewhere so admirable, *can* write, we will quote some verses of a piece entitled *The Poet*. It opens boldly and well.

'The poet in a golden clime was born,
With golden stars above;
Dower'd with the hate of hate, the scorn of scorn,
The love of love.'

After this, the whole poem is one dim and preposterous rant.

'He saw thro' life and death, thro' good and ill,
He saw thro' his own soul.
The marvel of the everlasting will,
An open scroll,
Before him lay.'

The poet was manifestly something other than mere mortal man.

'with echoing feet he threaded
The secret'st walk of fame:
The *viewless* arrows of his thoughts were headed
And winged with flame.'

They must have been visible at least at both ends.

'Like Indian reeds blown from his silver tongue,
And of so fierce a flight,
From Calpe and Caucasus they sung,
Filling with light,

And vagrant melodies the wind which bore
Them earthward till they lit;
Then like the arrow-seeds of the field flower,
The fruitful wit
Cleaving—took root——'

And so on to the end, in the same unintelligible or extravagant style, and in the same jarring, dislocating verse, framed, as it were, for the purpose of producing discord, of balking the ear, and adding as much as possible to the confusion and obscurity of the sense.

There is an ambitious *Ode to Memory*, the whole of which might be quoted as a lamentable instance of a vain and painful affectation of profundity. Every reader of English poetry is acquainted with the ode of Wordsworth, where he traces in childhood the intimations of an ante-natal state of existence. In this ode a philosophical fancy is pushed, we feel to its utmost. Childhood is no longer the most simple and innocent period of existence, so full of free, fresh, uncareful life; it comes 'trailing clouds of glory' from the heavens. It is not enough that its young eye, so sensitive to all impressions, kindles at the novelty of this world; it is not indeed the novelty of this world, but the reminiscence of a brighter, that calls the light into its quick, inconstant gaze. For our own part, nothing short of the beauty of that poet's verse could reconcile us to a strain of sentiment so forced and unnatural, and which robs childhood of its true and genuine charm—greater far, we think, than any which a Platonic philosophy can supply. Mr. Tennyson, falling into the same strain of thought, swells into still greater exaggeration, and speaks of

'The deep mind of dauntless infancy!'

We presume, at least, that he is here following in the same track of Platonic contemplation, but our readers shall judge for themselves; we will give them an opportunity of trying their own acuteness and perspicacity on the verse of our poet.

'In sweet dreams, softer than unbroken rest
Thou leadest by the hand thine infant hope,
The eddying of her garments caught from thee
The light of thy great presence; and the cope
Of the half-attained futurity,
Though deep, not fathomless,
Was cloven with the million stars which tremble
O'er the deep mind of dauntless nfancy.
Small thought was there of life's distress;
For sure she deem'd no mist of earth could dull
Those spirit-thrilling eyes so keen and beautiful;
Sure she was nigher to heaven's spheres,
Listening the lordly music flowing from
The illimitable years.
Oh, strengthen me, enlighten me!
I faint in this obscurity,
Thou dewy dawn of memory.'

There are probably two, and only two of these lines, (they occur several times in the course of the poem, and are repeated as if for our relief, as a sort of *refrain*,) which the reader follows with a consenting mind—

> 'Oh, strengthen me, enlighten me!
> I faint in this obscurity.'

But he must not prefer the petition they express to our author; for we assure him that throughout the whole piece there is not a single fragment a whit more intelligible or more likely to enlighten him, than what we have quoted.

In *The Palace of Art* one gathers something of the intention of the poet—one catches at a certain general idea—but one gathers, at the same time, that he has failed in any forcible exposition of it. To borrow an expression from a sister art, 'nothing is made out.' *The Two Voices*, again, is a very long and tedious dialogue between the better and worse parts of our own nature; if not so obscure as some others, it is, owing to its greater length, full as wearisome.

In this last poem, however, there is a brief passage so excellent that we cannot resist the pleasure of quoting it. And this we do the more readily, because it fairly illustrates the current strain of Mr. Tennyson's poetry, which, to its praise be it said, is quite free from that Byronic gloom and sullenness which infected many of the minor poets of our age.

> 'Whatever crazy sorrow saith,
> No life that breathes with human breath
> Has ever truly longed for death.
>
> 'Tis life, whereof our nerves are scant,
> Oh, life, not death, for which we pant;
> More life, and fuller, that we want.'

Here we must part company with Mr. Tennyson. We have been very sparing of quotations brought forward to justify our critical charges against him; for what can be more tedious and distressing to our readers than to have the dark spots selected from an author, and brought together in gloomy contiguity? We are confident we are far more obliging them, as we are gratifying ourselves far more, when we cull out what is beautiful and worthy of admiration. As we have exercised this forbearance in adverse quotation, we may still have space to conclude with one more extract of a pleasing description. We take the following verses from a poem addressed *To J. S.*, on the occasion, as we learn from the poem itself, of the loss of a dear brother.

> 'God give us love. Something to love
> He lends us; but, when love is grown
> To ripeness, that on which it throve
> Falls off, and love is left alone.
>
> 'This is the curse of time. Alas!
> In grief I am not all unlearned;
> Once thro' mine own doors death did pass;
> One went who never hath return'd.
>
> 'He will not smile—nor speak to me
> Once more. Two years his chair is seen
> Empty before us. That was he
> Without whose life I had not been.
>
> 'I knew your brother: his mute dust
> I honor and his living worth:
> A man more pure, and bold, and just
> Was never born into the earth.
>
> 'I have not looked upon you nigh,
> Since that dear soul hath fall'n asleep.
> Great nature is more wise than I:
> I will not tell you not to weep.
>
> * * * * *
>
> 'Let grief be her own mistress still.
> She loveth her own anguish deep
> More than much pleasure. Let her will
> Be done—to weep or not to weep.
>
> 'Words weaker than your grief would make
> Grief more. 'Twere better I should cease;
> Altho' myself could almost take
> The place of him that sleeps in peace.
>
> 'Sleep sweetly, tender heart, in peace:
> Sleep, holy spirit, blessed soul,
> While the stars burn, the moons increase,
> And the great ages onward roll.
>
> 'Sleep till the end, true soul and sweet.
> Nothing comes to thee new or strange,
> *Sleep full of rest from head to feet;*
> Lie still, dry dust, secure of change.

MODERN FRENCH PHILOSOPHY.

From the British Quarterly Review.

Nouveaux Mélanges Philosophiques, par THEODORE JOUFFROY, *Membre de l'Institut, Professeur de Philosophie à la Faculté des Lettres, précédés d'une notice et publies par* PH. DAMIRON. Paris, 1842.

THIS is a posthumous and incomplete work of the lamented Jouffroy, the disciple and successor of Cousin. Its chief article is a long and elaborate "Treatise on the

Organization of the Philosophical Sciences," in which he has expanded the views which he had published in his lifetime, as a preface to his "Translation of Reid." Its interest, however, mainly depends, if we mistake not, upon an episode, in which, in language of great pathos and beauty, he describes the progress of his mind from his early views of religion to philosophy. We have never before read such affecting philosophico-religious experience. It has not yet been given to the British public; and as we propose to submit a few remarks to our readers upon the general character of that eclectic school of which he was so eminent a professor, we shall proceed to translate an extract of some length from its pages.

"At the age of twenty years, I began to devote myself to the study of Philosophy. I was then in the normal school; and although philosophy was of the number of those sciences in which we were instructed, I was induced to cultivate it—not by the peculiar facilities of my position, nor by any personal predilection for any studies of the kind. Born of pious parents, in a district where the Catholic faith was still in its vigor, at the commencement of this century, I had been accustomed to consider man's future existence and the care of his soul as the great concerns of my life, and the whole course of my education had contributed to strengthen these serious dispositions. For a long time the dogmas of Christianity had fully responded to the cares and inquietudes which such dispositions awakened in me. To those questions which in my opinion, were the only ones deserving our attention, the religion of my fathers gave replies,—and in those replies I believed, and, thanks to that belief, my present existence was bright and clear, and the future seemed to unroll itself without a cloud. Content with the path I had to follow in this world—Content with the point to which it must conduct me in the next, viewing life under these two phases, and death which unites them; knowing myself—knowing the designs of God concerning me, and loving him for the goodness of his designs, I rejoiced with the joy which springs from a vivid and certain faith, in a doctrine that resolves all the great questions which can interest humanity. But at the time when I was born, it was impossible for such happiness to be lasting. The day was come when from the bosom of that peaceful temple, which had received me at my birth, and under the shade of which my earliest youth had flowed along, I heard the storm of doubt which, from every quarter, burst upon its walls and shook it to its base. My curiosity could not blind itself to those powerful objections—scattered like dust, in the atmosphere I breathed, by the spirit of two centuries of scepticism. Despite the alarm they gave me—perhaps, because of that alarm—these objections had forcibly seized on my understanding.

"In vain my infancy and its poetic impressions—my youth and its religious memories—the majesty, the antiquity, the authority of that faith in which I had been taught,—my every recollection, my whole imagination, my whole soul, revolted at an invasion of unbelief that wounded them so deeply; my heart could not defend my reason.

"The authority of Christianity once placed in doubt before its eyes, my reason felt all its old convictions tremble at their base; it was bound in order to re-confirm them, to examine the value of their claims: and notwithstanding the bias with which it entered on that examination, it came forth sceptical. But this melancholy revolution was not wrought in the open light of my consciousness: too many scruples,--too many vivid and sacred affections made it an awful task to avow to myself its progress. It took place silently, by an involuntary effort, in which I was not an accomplice, and for many a day I was no longer a Christian, except that, in innocence of intention, I should have shuddered at being suspected to the contrary—I should have thought the charge a calumny. But I was too sincere with myself, and I attached too much moment to religious questions, now that age was strengthening my reason, and the studious and solitary life of the university was confirming the meditative tendencies of my spirit, to allow this uncertainty as to my own opinions any longer to continue.

"I shall never forget the December evening, when the veil which had concealed my own scepticism from myself was rent in twain. I still hear my footsteps in that narrow and scanty chamber, where, long after the hour of sleep, I was wont to pace: I still see that moon, half veiled in clouds, which at intervals illumined the cold panes. The hours of night passed away and I perceived it not. Anxiously I followed my thought as from step to step it descended to the ground of my consciousness, and, dissipating one after another the illusions which had hitherto concealed them from my view, made my errors every moment the more obvious.

"In vain I clung to these last convictions, as a shipwrecked sailor to the ruins of his ship; in vain, in terror at the unknown waters in which I should have to float, I threw myself back for the last time upon my infancy, my family, the scenes of my youth, all that was dear and sacred to me; the pitiless current of my thought was too strong; parents, family, reminiscences, convictions, it tore me from them all; the inquiry became more obstinate and more severe; as it approached its term, it stopped not until it had attained it.

"That was a frightful moment, and when, towards morning, I threw myself exhausted upon my bed, my early life, so joyous and so rich, seemed to expire, and behind me, there

opened out another, sombre and desolate—when, thenceforth, I was to live alone—alone with that fatal thought which had exiled me thither, and which I was tempted bitterly to curse. The days which followed this discovery were the saddest of my life. To tell the anxieties with which they were agitated would be too long. Although my understanding was not without some pride in considering its work, my soul could not become accustomed to a state so little suited to human weakness; by some violent reactions it strove to regain the shore it had lost; it found amid the ashes of its past convictions, some scintillations which seemed at intervals to re-illume its faith.

'But these convictions, having been overturned by reason, could be re-established by reason only. These glimmerings soon expired. If, in losing faith, I had lost all anxiety concerning those questions which it had resolved for me, doubtless this violent state of mind would not have long continued; fatigue would have made me dull, and my life would have become, like that of so many others, drowsy in its scepticism. Happily, it was not so; never had I more felt the importance of those problems, than since I had lost their solution. I was sceptical, but I hated scepticism. This it was which decided the direction of my life. Unable to endure my uncertainty upon the enigma of human destiny, and having no more light from faith, in order to resolve it, there only remained to me the lights of reason. I resolved then, to consecrate all the time that should be necessary, my life, even, if it was wanted, to this research. It is by this path I found myself led to philosophy—philosophy, which seemed to me to be identical with this research. * * *

'The moment and the place when I formed this purpose could not have been more favorable to its execution. France, after the slumber of the empire, had at length aroused itself to a philosophical movement. Two men, of character and talents the most opposite—though equally rare, came forward to reanimate it: the one, by reproducing in a style admirable for its clearness and its elegance, the metaphysical doctrines of Condillac, had, so to speak, resuscitated the philosophy of the eighteenth century; the other, by attacking, in lectures distinguished by an incomparable logic, these same doctrines, took the initiative of that inevitable reaction which the genius of the nascent nineteenth century developed against that of the eighteenth. Two years of prelections had sufficed for these illustrious professors, for fixing the points of debate, and for gathering all our youth in their train; both then relapsed into silence, and the normal school remained full of recollections of their words, and of the ardent spirit they had inspired. Among the distinguished spirits it contained, the two philosophies found their representatives, and, as in the world, the two parties arrayed themselves with greater force, enthusiasm, and vivacity. The minds distinguished for elegance and scepticism were for the older doctrines; those which were the more ardent, naturally more revolutionary, were for the newer ones, and in the lively discussions which absorbed them, one could not yet foresee—that which, nevertheless, in an university of young men, must necessarily happen—the defeat of the past, and the complete triumph of the new doctrines. One man, still very young, but who has never been more remarkable for his eloquence than he was then—took the lead of the latter party. After having been a disciple, he became a professor. A conference of philosophy was assigned to him in the normal school, and every one interested in these discussions, to whatever party he belonged, waited with impatience the commencement of his lectures. One may judge if, in this situation, into which I was thrown, I, who had heard neither M. de La Romiguière nor M. Royer-Collard, partook of this impatience.

'Nevertheless, both the debate which stormed around me, when I could comprehend its purport, and the brilliant lectures of the young professor, fell far short of those points to which I returned ever and anon, and which distracted my understanding and my heart. My mind, at its first essay in philosophy, felt persuaded that it was to meet a regular science—one which, after having shown its object and its processes, would conduct it to a certain knowledge on those things which are of most interest to mankind. * * * * In one word, my understanding, excited by its wants, and enlarged by the lessons of Christianity, had assigned to philosophy the great object, the vast extent, the sublime reach of a religion. It had ranked the design of the one as equal to that of the other. It had imagined that their only difference lay in their processes and method; religion being imaginative and positive, philosophy inquiring and demonstrative.

'Such had been its hopes, and what did it find? All that struggle, which had awakened the dormant echoes of the Faculty, which excited the heads of my companions in study, had for its object—its only object, the question of the origin of ideas. Condillac had resolved it in a mode which M. de La Romiguière had reproduced, but modified. M. Royer-Collard, treading in the footsteps of Reid, had resolved it in another mode, and M. Cousin, evoking all the systems of ancient and modern philosophers on this point, and arraying them face to face, exhausted his powers to prove that M. Royer-Collard was right, and that Condillac was wrong. This was all, and in my inability to seize those secret relations which link the apparently most abstract and arid problems of philosophy with the most life-giving and most practical ones, it seemed nothing worth. I could not but feel astonished that men employed themselves on the origin of ideas with an ardor so great, as to declare that it involved the entire of philosophy. Nevertheless, had they, in order to console and re-assure those whom they had confined to so arid and nar-

row a question, commenced by showing the vast and brilliant horizon of philosophy, and, in perspective, the great human problems as to their position, and the road by which to reach them, and the utility of ideas in the inquiry—then such an outline would have kept me patient. But no; this regular outline of philosophy, which did not then exist, which even now does not exist,—they did not offer, and the philosophic movement was as yet too young for it to feel its need of one. M. de La Romiguière had appropriated as an heritage the philosophy of the eighteenth century, confirmed as it was to one problem; and had not expanded it. The vigorous genius of M. Royer-Collard, recognizing this problem, had plunged into it with all his weight, and had not had time to extricate himself. M. Cousin, thrown into the thick of the fight, combated it from the first,—but more slowly sought its solution. The whole of Philosophy was thus in a narrow abyss, where one wanted air, and where my soul, but recently exiled from Christianity, was suffocated. Nevertheless, the authority of the masters and the fervor of the disciples were so imposing, that I dared to show neither my surprise nor my disappointment.'*

We have translated this long but deeply interesting document, as introductory to some remarks upon the present state of the French eclectic philosophy. A considerable familiarity with the writings of this school convinces us that the above may be regarded as a type of its moral and intellectual tendencies. It would, indeed, be a foul wrong to charge either its founder—Cousin—or his followers in general, with the denial of Christianity; but, excepting that, they all may be said to adopt the same views as to the wants of humanity—the same conviction of the incompetence of Christianity by itself to meet these wants—and the same hope that a sound philosophy will supply them.

The modern French philosophy has a high relative value. The systems of Condillac, of Cabanis, of Royer-Collard, of Cousin, of Jouffroy, are well worth our study, separating them each from each; but the moment we regard them as a series, their individual authors are forgotten, and they become of higher moment as the progressive development of a nation's thought. If in history we are no longer to be content with a barren chronicle of events—if the laws of the highest inductive philosophy must be applied to those events—thence to ascertain the most general facts in the progress of humanity; in like manner should we be impatient at the mere record of theories, and should seek for their mutual relation and dependence. Take the abovementioned as an example: compare them in their chronological order, and a new truth will be elicited. The sensualism of Condillac gradually becomes the materialism of Cabanis; but no sooner has the general mind tried it in its extreme exclusiveness, than there ensues re-action and tendencies to spiritualism, few, it may be, at first, in Royer-Collard, gradually acquiring force and number until they lead to the modified rationalism of Cousin. This is an interesting fact:—it illustrates and is illustrated by the principle that there is a general mind—that society thinks—that its processes are no more capricious or independent of laws than those of the individual.

We propose more fully to explain ourselves, by adverting to these several schools as to their formation.

At the middle of the last century, Cartesianism was dominant in France. It is true that among such men as Bernier, Molière, Chapelle, and Voltaire, there might be found the principles of a practical epicurism; but the metaphysical dogmas of Gassendi found no favor. It was then that 'Locke's Essay on the Understanding' was translated, and the old debate resumed its vivacity.

There were but few in France who could or would comprehend our illustrious countryman. But ill-trained to metaphysical inquiry, they who did embrace his doctrine overlooked its true spirit. While Bishop Berkley and Hume, among ourselves, deduced from it a pure idealism—strange to say, Condillac, in France, discovered in it nothing but materialism. In a series of lectures, Cousin strives to prove the agreement between Locke and Condillac. In his 'Cours de l'histoire de la Philosophie,' Cousin has elaborately, but, we think, unjustly, argued that Condillac was Locke's genuine disciple. To disprove this it will suffice to show that their starting points differ essentially. Locke, from the very first, assumes, as his postulate, the existence of the mind—enthrones it within the man—and conveys to it, from without, the images of sense, to be varied in their relation, and sublimed in their essence, by virtue of that mind's own proper activity. But what does Condillac? As the initiative of his system, man is assumed to be an unintelligent statue—successively he is invested with his senses—the world without correspondingly awakens his sensations, and then, transformed

* Jouffroy, pp. 111–121.

and modified by forces from without, not by forces from within, they assume the innumerable diversities of thought and imagination. We think that this point cannot be too tenaciously maintained by ourselves. Our countryman is not justly chargeable with the materialism of France. We find the distinction between physiology and psychology in the first pages of his essay; and had Condillac studied it without an extreme love for simplicity of system, he had avoided that one-sidedness with which he estimated man.

The philosophy of Condillac triumphed in France. It was reduced to practice. It was realized in the popular manners. And, as was to be expected, barbarism—savageism followed. It became a nation's creed. Of God, of anything that transcends man, it spake not. It embraced no high truths. It descanted much upon the faculties of man, but little of his nature. Even those faculties with which it concerned itself were those in immediate relation to the body—physical sensibility, memory, imagination, it ingeniously analyzed; but of the higher acts of the intelligence, developing themselves in the conceptions of genius, in universal ideas, in sublime intellectual intuitions, in the contemplation of the ideal—of those it had not even a suspicion. It could not soar beyond its own atmosphere. It had no heaven. If it did catch some reflections of the eternal light beyond its horizon, it called them hallucinations. Man it made of the earth, and he was, indeed, earthly.

It is more than probable that Condillac did not foresee the inevitable tendencies of his system. A man of letters, he speculated—he dreamt not of practical results. But the time came when it should play its part in the convulsions of the French Revolution. That the sentient subject in man, were the nerves—that they thought, and determined, and reasoned, and judged—that the body had organs, the functions of which were to think, to determine, to judge—that the soul, therefore, was but a function of the body—that it perishes with the body—that 'death is an eternal sleep,' were the frightful metaphysical dogmas told to his countryman—told to them by Cabanis, the rigid follower of Condillac. He was believed.

In our introductory extract from Jouffroy, we met with the significant expression in reference to the state of philosophy—'le sommeil de l'empire.' The nation's mind needed repose. It was exhausted with its revolutionary speculations. It is thus we may account for the fact, that Condillac reigned in peace. Discussions ceased. As when Aristotle was in the ascendant, his disciples had nought to do but to develop the meaning of their master. But the spirit of inquiry only wanted to recruit her strength, and the public mind in France, instead of being shocked, welcomed M. La Romiguière when he challenged it.

In a brief critique upon 'La Romiguière's Lectures in Philosophy,' Cousin profoundly remarks; 'There are, as it were, two men in M. La Romiguière—the old one and the new—the disciple and the opponent of Condillac. The opponent is frequently to be seen; but it is in this we propose to mark a phenomenon. The disciple is still more frequently to be seen; and it is this which proves most clearly the reality of a nascent philosophical revolution; for, if the work of M. La Romiguière were *an entirely new system*, without any relation to that which preceded it, and especially with that of Condillac—which is their common type—it would exercise no influence on the future;—it would only be one system more in a multitude of systems—a work more or less ingenious, but unproductive: *for that system alone can be productive which is animated by the spirit of the age—which is bound up with its wants, its vows, its tendencies.*'* We quote this remark, for it so truly accords with the spirit of the philosophy of history. Every man is more or less the product of his age. Every event is one of a series, and has its local as well as its absolute value. Every genuine system—every theory—is a child and a parent. La Romiguière could not come to an open rupture with Condillac, but the spirit of the age aroused him to independence. The fundamental error of Condillac refers to the origin and generation of ideas. We have seen his theory; but his disciple strove to correct it. Ideas, said he, must be distinguished as to their matter and their form. The matter may be the product of sensation—the form is the product of an intellectual activity. This was the *first* step of materialism towards truth.

It was at this moment that the bewildered Jouffroy uttered the pathetic lamentations with which we introduce this article. It was then that, in common with many of the intelligent and ingenious youth of France, uncorrupted by personal commerce with

* Cousin. Revue de La Romiguière, p. 1.

crime and brutality, he demanded, 'Why am I here—for what purpose? Is my entire existence bounded by the limits of this life? What will be the life beyond? Who made me and the world around me? When did the human species begin to exist? when and how will it cease?' Let us conceive of these as the impassioned demands of this young man—of crowds of similar young men, when, in default of the ministers of religion, (for the altar had sunk to the dust,) they crowded round their philosophical professors—the ministers of reason! In anxious thought, they press beyond the present and the visible. They would descend to the abysses of the soul. They would sound the depths of man's will—his seat of life. They would listen to their own inmost fears, as that abyss, in myriad forms, re-echoes them. They would know man in the secrets, not the surface, of his nature. They would know the problem of the universe.

And now another step is taken. La Romiguière had answered, in reply to the questionings of his age, that man had a soul —that his thoughts and imaginations, his judgments and his resolves, were something more than varieties of sublime matter—at length, 'As the poison was of foreign growth, so also has been the antidote. The doctrine of Condillac was a corruption of the doctrine of Locke; and, in returning to a better philosophy, the French are still obeying an impulsion communicated from without. This impulsion may be traced to two different sources—to the philosophy of Scotland, and the philosophy of Germany.'

The French were indebted to M. Royer-Collard for their knowledge of the Scotch philosophy. And but a slight familiarity with its leading truths will help us toimaginet he wonder and the interest his hearers must have felt, when, passing from the cold and unproductive theory of Condillac, they luxuriated in the warm and generous doctrines of Reid and Stewart. The soul —its immortality—its moral relations—its first principles descanted on before young men, who had been wont to hear that man was mere matter, that good was evil, and evil good! This was a vast stride towards spiritualism.

We have approached the period of the French eclectic philosophy. In order to appreciate this, the last movement in metaphysical science, the exact moral position of the French public ought never to be forgotten. We have seen them aroused from moral stupor—the stupor incident to infidelity. Their spiritual appetencies are many and intensely craving; but Christianity is still in disfavor. They have seen her encrusted with too many superstitions—have suffered too much from the intolerance and vices of her priesthood—to allow them, while the recollections thereof are fresh and soul-harrowing, to feel any respect in her revelations, or any confidence in her overtures! Nevertheless, these moral wants return, and they are pressing. What is truth? Is it merely relative to man, or is it absolute and unconditioned? What is the good? Does it vary with each man's interest and convictions, or is it immutable and eternal? What is beauty? Is it the creature of a capricious taste, or is it, in its multiform phases, reflected from the First Fair? Such, we say, were the questions urged and re-urged by the French literati. A *spurious* form of Christianity offered to uravel the enigma, and was rejected. And this must be weighed, and weighed well, in order to understand and value their next movement in philosophy.

We do not propose, at present, to furnish any minute details of this movement. It will suffice for us to remark, that in its spirit, as well as in the name which Cousin, its leader, gave to it, it was essentially eclectic. That the truth of which it was supposed to consist, was truth which did not belong to any one system; for it would cease to be pure and universal truth, if it took the formula of any particular theory; that it was to be found in neither the works of any one philosopher, nor in the opinions of any one age or any one people; that it was to be found in all the writings, all the thoughts, all the speculations of men, and, moreover, in all the facts by which the life of humanity has been manifested; and, therefore, man had not to *make* a system of philosophy; that it was already made for him by the actual development of the world, of which man, himself, is but an integer; and, hence, that the task of the philosopher is to disengage it from the perishable forms under which it has revealed itself, and thus determine that which is immutable and necessary, in the very midst of that which is variable and contingent; —these were its characteristic outlines.

It was very certain that this philosophy would be miserably defective if it stopped here. It had been a mass of human opinions without any consolidation. It had been an assemblage of limbs and organs, gathered together indiscriminately, adjusted with

more or less art, but which could never constitute a living body. 'But we have,' says Cousin, 'a criterion by which to separate and select from among these elements. We have the criterion of truth, of necessity. It is not in any human doctrine—not in any individual reason. It is reason universal—reason absolute. It is objected, eclecticism is a syncretism which confounds all systems together. We answer, eclecticism does not confound all systems together; for it leaves no one system intact; it decomposes each one of them into two parts—the one false, the other true; it destroys the first, and admits only the second in its work of recomposition. The true portion of one system it adds to the true portion of another system—one truth to another truth, that so it may form a true aggregate. It never confounds one entire system with another entire system: it does not then confound all systems. Eclecticism, therefore, is not syncretism: the one is the exact opposite of the other. The one is a choice—the other is a mixture. The one discriminates—the other confounds.'*

Now, be it observed, that this took place at a time and in a country when and where every question that was proposed was one concerning principles; every one asked for principles, knowing full well that there was no stability without them. There were few men, then, who did not aspire to the glory of being founders. Mankind seemed to them to have been born only yesterday—the world to have just issued out of chaos—and each one's reason to have the mission to organize it.

Cousin reveals his state of mind at this period in his Preface to the first edition of his 'Philosophical Fragments:' 'The spirit of analysis has destroyed much around us. Born in the midst of ruins of all kinds, we feel the necessity of reconstructing them. This necessity is pressing—is imperious. We are in peril while we continue in our present state.'† Could any other feeling have been more natural to a man that had mused long and thoughtfully upon the past, and within whom the fire had burned as he communed with Plato and Aristotle, with Proclus and Plotinus? The re-action bore him to the opposite extreme of his age.—Philosophers around him proclaimed, 'All the past is false!' He retorted, 'All the past is true!' They had rushed across the threshold of the temple of truth—had ruthlessly defaced its inscriptions—had broken its columns—he, with a heart indignant at the sacrilege, vowed to give himself no rest until he had restored even its entablature.

It was at this moment that Jouffroy caught the ardor of his master:

'A reasonable man,' said he, 'will belong to no one school, no one sect, no one party; nevertheless he will be neither skeptical nor indifferent. He will be *eclectic*.

'Eclecticism is not skepticism. Skepticism denies that there is truth, or denies that we can distinguish it from error. Eclecticism admits not only the existence of truth, it establishes in what it consists, and thence how it may be recognized. Two things exist: reality and idea—which is its image. Reality is neither true nor false. Idea only is susceptible of truth or of falsity; it is true when it is conformed to reality, it is false when it differs from it. In consequence of the infirm and limited nature of our intelligence, which would perceive reality—idea can never be either complete or faithful; never complete, for never can our intelligence embrace entire reality; never faithful, for never can our intelligence seize exactly that part of reality which it embraces,—never can it translate faithfully into the language of ideas that which it has seen, nor into the language of words that which it has translated into the language of ideas. Every opinion, then, is as necessarily false as it is necessarily true. Eclecticism, then, based upon the nature of idea, must neither wholly admit, nor wholly reject, any one opinion, but, starting from reality; which is the necessary type of all opinion, must seek and admit that which it finds of each opinion in agreement with that type,—must seek and reject that which it finds of each opinion to be exclusive and inexact.

'Still less is eclecticism to be called indifference; while it admits exclusively no one opinion, it does not pretend that no one is preferable to another—but only that no one is perfect. It prefers some one code, some one formulary, some one system; but, *because* of its love of truth, it cannot admit that that code, or that formulary, or that system, contains the whole truth, and nothing but the truth.

'That which distinguishes eclecticism, that which gives birth to it, is the profound sentiment that the world of opinions is only the image of the world of realities, and that therefore, opinions can be judged neither in themselves, nor by their consequences, nor by the authority of their author, nor by their antiquity, nor by the quality or number of the men who have professed them, nor by any other sign than their conformity to reality; whence it follows, that to examine an opinion without having beforehand taken cognizance of the reality which it pretends to express, is to aim at the end and to renounce the means. *The substitution of*

* Œuvres de Victor Cousin, tom. ii. p. 25.
† Ibid. p. 28.

this true criterion instead of the crowd of false criterion hitherto adopted is that which has produced eclecticism, its whole spirit and the entire of its results. Thence that conviction that every opinion is necessarily true and necessarily false; thence that selection of what is true in each; thence that universal tolerance; thence that historical spirit, conciliatory, expansive, which, issuing forth from home, visits the beliefs of all countries and all ages, comprehends all languages, admits, as observations, all systems, gleans from all quarters without settling down anywhere—because truth is everywhere in part—but truth entire is in no one country, no one age, no one man.

'This new spirit, introduced into the natural sciences, has dethroned opinions and substituted observations, and within fifty years has given them an impetus greater than that which they had acquired from the beginning of the world.

'This new spirit, introduced into criticism, is destined to conciliate the romantic and the classic school—as the two different points of view of real beauty ...

'Thanks to this new spirit, the modern philosophers perceive that there is a philosophy in Christianity, and modern Christians conceive that there is a religion in philosophy.

'Thanks to this spirit, the French modern philosophy has ceased to swear by Condillac, and no longer feels the necessity of swearing by any one. It publishes Plato, Proches and Descartes; it expounds Locke, Reid, and Kant, reconciles ages and countries, finds 'the true' everywhere, and 'the false' everywhere, and while investigating human nature,—which is philosophical reality,—prepares in silence a treaty of peace between all systems. Perhaps it is among the destinies of France to see it signed one day at Paris.'*

We have, in this translation, given the best statement with which we are acquainted, of the principle and pretension of French eclecticism. As we have remarked before, it is not our province, in this article, to canvass it in detail. We have simply endeavored to trace its development, and to account for that development. Nevertheless, it will not be beyond our purpose to state why we regard it as incomplete. Eclecticism, aiming, as it does, to be universal—affirming, as it does, that exclusiveness is *ipso facto* untruth—is, nevertheless, singularly intolerant and partial upon a point most vital. Were we to brand it with pantheism—that would be accounted fanatical; were we to denounce it as anti-christian—that would be put down to priestcraft. We must, however, affirm our conviction that it has omitted Christianity in its professedly universal selections. Proclus is one of the great models whom Cousin has studied. Proclus omitted Christianity, and so failed to be essentially eclectic; and exactly so, we think that Cousin, not so much from disbelief in Christianity, as from a disgust at the form under which it has been presented to his observation, has excluded it likewise. The sentence which we have above quoted from Jouffroy will explain our meaning. 'Thanks,' says he, 'to this new spirit, the modern philosophers perceive that there is a philosophy in Christianity, and modern Christians conceive that there is a religion in philosophy.' Then each one has truth and religion as its elements. Then the philosopher can acquire religion by philosophy, without Christianity. 'In Christianity are enfolded all truths.' But these eternal truths can and ought to be described, disengaged, illustrated by philosophy. In reality, there is but one truth under two forms—the mystery and the scientific development; I revere the one—I am the organ, the interpreter of the other.* This we believe to be the fatal defect of French eclecticism—this we believe to be the reason why Jouffroy died confessing its inadequacy to satisfy his wants, and to respond to his desires.

Nevertheless, we augur from this philosophical movement the most happy religious consequences to France. The great leaders of whom we have spoken felt the necessity of having a belief. They aspired after the universal, the absolute, the eternal—after principles which never yield, and first truths which never perish. And, by the confession of one of them, philosophy has failed to realize those aspirations. Would that he had held fast to the revelation of that Great Being who has there proclaimed the absolute, the universal, and the eternal to man!

We believe that these admissions of Jouffroy will work well, and that soon the thoughtful and courageous among the eclectics will accept Christianity, as destined to be to man what philosophy, in its best form, never can be. We shall again see times such as those of a primitive Christianity, when illustrious men, whom the sublime doctrines of Plato and Zeno had inspired with the desire of truth, and the love of virtue, were forced, as it were, to become Christians, by a despair of finding anywhere else the eternal objects of their desire and their love. The establishment of Christian-

* Jouffroy de l'Eclecticisme en Morale, p. 360-1.

* Œuvres de Cousin, tom. i. p. 109.

ity in the earth followed in the wake of the Alexandrian eclecticism: we believe that in France, after her eclectic effort has done its work, Christianity will again triumph.

THE AUTOBIOGRAPHY OF SIR SIMONDS D'EWES.

From the Spectator.

The Autobiography and Correspondence of Sir Simonds D'Ewes, Bart., during the Reigns of James I. and Charles I. Edited by James Orchard Halliwell, Esq., F. R. S., &c. &c. In two volumes. London. Bentley.

The name of D'Ewes is met with if not remembered by the general reader, as a reference to statements in the text of other writers; but his character and merits are chiefly known to antiquaries or historians from the information contained in his great publication, *The Journals of All the Parliaments during the Reign of Queen Elizabeth*, and his manuscript collections and writings of various kinds, preserved at the British Museum in the Harleian MSS. In exhuming his autobiography from the British Museum, and printing it with a selection from the family correspondence, Mr. Halliwell has performed a useful service; although it exhibits no moving accidents of any kind, and the substance of its historical information has been already conveyed to the public.

The leading facts in the life of Sir Simonds D'Ewes are few. He was born in 1602, and died in 1650; though his autobiography only comes down to 1636. After being sent to various schools, he entered St. John's College, Cambridge, as a Fellow Commoner, in 1618; and in 1620 he began his studies at the Temple,—having been admitted as a member nine years before, when only nine years old! It was originally his intention to practice the law; but, having in 1626 married an heiress, and his father then settling five hundred a year upon him with another six hundred in reversion, D'Ewes devoted himself to the study of heraldry, legal and parliamentary archæology, and history; intermixing private and county business with his studies. In 1639 he rose to the dignity of High Sheriff for Suffolk, where his property was situated; in the year following he was elected Member for Sudbury; and in 1641 he was made a Baronet, by Charles the First. Notwithstanding this favor, he sided with the Parliament on the breaking out of the civil wars,—as was to be expected from his religious views and ideas of civil government; the same consistency included him in the expulsion known by the name of Pride's Purge; and two years afterwards he died.

There is not, apparently, in this outline, enough to fill nearly six hundred octavo pages, especially when we consider that the autobiographer stops short of the most busy and active fourteen years of his life: but D'Ewes was essentially a learned gossip. The history of his family is unfolded with all the minuteness of a herald, the clearness of a logician, and the precision of a lawyer. And by family we mean his descent both on the father's and mother's side; with a still more elaborate history of his wife's connexions, who seem to have had the best blood,—for though the D'Ewes were originally ancient and noble, of the Duchy of Guilderland, yet they left it in consequence of civil brawls, and came to England in the time of Henry the Eighth; passing, as D'Ewes expresses it, under a cloud, which also seems to us to break the chain of evidence. These genealogical particulars, however, are not mere dry heraldry: D'Ewes exhibits his own character in narrating the trouble he took to hunt out evidence and establish facts, sometimes from records, sometimes from living witnesses. In like manner, he minutely tells any family circumstance,—as the wonderful strength of a man-cook,—and narrates at large any family incident, or paints a family portrait; some of which are interesting from their domestic character, and the natural feeling of the writer, despite of a cold disposition and formal manner. The different persons he encountered—and he encountered many, and some of eminence—are described in a similar way; as well as the public sights he saw—and, like a true gossip, he began early to look about him, and to frequent places where men do congregate. He also systematically intermingles notices of public events and public characters with his own private affairs; and although little new light is thrown upon any thing, it is not without interest to read the remarks of a contemporary upon events which now stand out in historical magnitude,—as the foundation of the colony of New England, the levy of Ship-money, and the disputes in the Church originated by

Laud; the last, by the by, an exact counterpart of the present dissensions. With the slightest allowance for the age, which affects the style, and for circumstances, which place the modern Lauds undermost, the following diatribe might be written by a D'Ewes of the present day.

"For mine own part, I have ever maintained obedience to the magistrates in all lawful things, and that the conscience ought not to be enforced; nay, I can honor and esteem a virtuous or learned Papist, who, being educated in that religion, supposeth it to be the truth. But for men to call themselves Protestants, as Bishop Laud, Bishop Wren, and their wicked adherents, to swallow up the preferments of our Church, to inveigh against Popery in word only, and in the main to project and plot the ruin of the truth and gospel, to maintain and publish the most gross and feculent errors of the Romish synagogue, to cause God's day to be profaned, his public service to be poisoned by idolatry and superstition, his faithful and painful ministers to be censured, suspended, deprived, and exiled, and to threaten a speedy ruin to the power of godliness,—this my soul abhors as the highest step of wickedness and of prevarication against God and his honor. I cannot but account the Pope, the Cardinals, and Jesuits themselves, saints in comparison of these men. For as a few traitors within a besieged city are of a greater danger for the ruin of it than a whole army without, so doubtless what Theodore Beza saith of pseudo Lutherans of Germany is true of these men; that they do no less impudently and furiously weaken and undermine the gospel of truth, than if they were hired by the Pope himself at great rates. Besides, the gross heresies and horrible abominations of the Romish synagogue are so many and notorious, as I dare boldly aver, that it is impossible for any true Protestant, that knows but the truth in some indifferent measure, and leads his life in some proportion like a pious Christian, ever willingly and by way of choice and election to turn Papist, either in whole or in part. But I see by daily experience, when divines, scholars, and others, are given up to a profane, vicious, and atheistical life, they so far detest and hate such as be godly, as by a just judgment of God they are at length given up to the hatred of the truth itself also, and readily take in their defence and creed, any Popish, Palagian, or Anabaptistical tenets."

It will be seen from this extract, that the style of D'Ewes possesses a scholarly force and clearness. Mere expression, however, is of little effect unless it convey a true transcript of the author's mind, which alone imparts a character to composition. It is this kind of character which gives its value and attraction to the autobiography before us. Whatever he narrates had an importance in the author's own mind; he puts down nothing for mere writing's sake. His particulars, too, are often of a general character—one of a class, though the class be small; his comments frequently treat of religion or government largely; and his notices often relate to persons whose very names excite attention. But the most striking feature of *The Autobiography of Sir Simonds D'Ewes* is its domestic picture of a family of the time of the two first Stuarts, or rather the Elizabethan age. The painting, however, relates rather to feelings and practice than to mere manners; for the nature of D'Ewes was not adapted to external accomplishment or frivolities, as his studies raised him above them. Making allowance for the formal and precise character of the man,—which, however, did not subdue natural feelings so much as shape and regulate their exhibition,—this autobiography may be considered as one of the most complete exhibitions of an individual and a family that has ever been written.

Some of the most curious portions of the work are those which relate to his own courtships and the second marriage of his father. The system of what is called "marrying" young people by their friends was at its height during those days, as it still prevails on the Continent,—although something more of freedom of choice seems to have been generally allowed the parties than we are apt to suppose. But the working of the system appears to have destroyed all the romance of love and courtship—to have made it more a matter of business, and of liking or bearing with, than of affection. A novelist, painting the courtship of a youth not out of his teens, would place all the doubts of the lover on the inconstancy of his mistress; whereas, the fear of Master D'Ewes was on his father.

COURTSHIP IN THE REIGN OF JAMES THE FIRST.

I must now come to speak a little largely of a particular business that concerns my first love; which, because it broke off abruptly and abortively, before the end of the ensuing summer, I will a little anticipate the after passages of it, and finish it here at once. This match was propounded first unto me upon Saturday the 20th day of October in the year 1620; to which, being of itself very worthy of entertainment, I was the rather induced to hearken by reason of my small stipend and inconvenient lodging at the Six Clerk's Office in Chancery Lane, [his father was one of the Six Clerks,] whereby my precious time was misspent for want of a private chamber and study wherein

to reside. From that day, for above half a year after, I had many discourses with one Mr. Boldero, a gentleman that first proposed it, how to effect it, and misspent many an hour in the care and thoughts of it, till the 8th day of this instant May, being Tuesday, when Mr. Waldegrave, of Lawford Hall, in the county of Essex, father of the gentlewoman named Jemima, being his younger daughter and co-heir apparent, came to London purposely to treat with my father about it; with whom after thrice meeting and some differences composed, he made a full agreement, so as there seemed nothing to be wanting to make up a full and due consummation but our mutual likings, who were to have matched: so now, had I not feared my father's inconstancy, I should have assured myself of a seasonable accomplishing my present expectation.

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The next day, being Friday, May 25th, I arrived at Colchester between twelve and one; and that afternoon saw Miss Jemima with the Lady Bingham her mother, (whom, having been the widow of Sir Richard Bingham, Knight, Mr. Waldegrave had married to his second wife,) and had some discourse with the old lady, and some short view of the gentlewoman; whom I did not take to be so handsome at this first view as I thought her afterwards. I went not home at this time with the old lady, but lay at a town called Langham, near to Lawford, at one Mr. Littlebury's house; from whence, the next day, I went with him to Mr. Waldegrave's in the afternoon, and had full access in private discourse afforded me with the young gentlewoman. That night I returned again with Mr. Littlebury (who had used a great deal of faithful care to make up this match) to his house; where having staid till Monday, May 28th, in the forenoon we went again to Mr. Waldegrave's, and dined there. After which ended, I had several discourses with the young gentlewoman, and received from her so many remonstrances of acceptation and affection, as her own father acknowledged she never had done before; and we all thought the business in fair forwardness for the consummation thereof. But I, fearing my father's inconstancy, by reason he was to settle above 1,100*l.* per annum upon me, and to receive no portion, had all my expectations even at this present mixed with doubts; which were the more increased upon my return to him next day to Newplace, (for, his coach-horses going cheerfully, I went the whole thirty-eight miles from Lawford thither in a day,) where having related to him my unexpected success, I found him in some strait, as if he knew not well now how to break it off, or go back.

At my next return therefore thither, he wrote a strange letter to the young gentlewoman, and gave it me in charge to bring him an answer from her. It was penned in a good phrase, but mixed with some unseasonable imperious passages; so as, presaging what effects it would produce, I kept it two or three days ere I delivered it after I was come to Mr. Waldegrave's; but fearing my father's displeasure if I still kept it, and so an abortive issue of this overture, I at last rather chose to put it to the hazard. Truly, both the father and the young gentlewoman, whose affection I had gained very far, were content for my sake to have passed it over; but the Lady Bingham her mother told me plainly, my father took so early authority upon him as her daughter should never come under his power; and so; after all that cost bestowed by my father, being near upon 80*l.*, and all the travel and pains which had been bestowed by myself and others to effect this business, (although it hung in suspense till the 19th day of September next ensuing,) yet all was finally dashed."

The next matchmaking in which our hero engaged was the marriage of his father, a year or two afterwards. It now seems odd to find a young man just of age volunteering his advice upon such a subject, and offering his services as an agent to carry on the suit.

"Though the talk of this princely-intended match [Charles the First with the Infanta] filled the thoughts and discourses of most men, yet did the expectation of another marriage which nearly concerned me take up a great part of my time in the latter end of the foregoing February and the beginning of the ensuing March. For my most dear and blessed mother having deceased above four years and eight months now past, and my father, since his being a widower, falling into treaty with several persons about his second marriage, some of them being in the prime of their youth, I was almost continually agitated and troubled lest he should at last pitch upon some young person altogether unfit for his age; by which means I should not only reap much discomfort in my present life, but it was possible also he might thereby be drawn to give away the greatest part of his estate to the issue of a second wife, of which I saw daily experience of like cases, to the utter ruin of many ancient and nobly extracted families. Having, therefore, no thought or hope to get any estate settled on myself by my own matching, by reason of my late miscarriage in my first treaty, which gave me abundant experience of his inconstancy, my next votes and wishes were to see him well and happily married to some good and ancient widow, every way fit for him; and accordingly, he fell in treaty this February with Dame Elizabeth Denton, the widow and relict of Sir Anthony Denton, Knt., late of Tunbridge, in the county of Kent. She was the eldest daughter of Thomas Isham, Esq., of Langport, in Northamptonshire, deceased, and sister of Sir John Isham, Knt., living. Her age was about forty-five; and her estate, both in ready money and jointure, so considerable and fair, as my father had just grounds even

in that respect, she requiring but a reasonable jointure, to desire the match. But she was, besides, very discreet, frugal, and religious; which, added to her estate and extraction, being both without exception, occasioned a gentleman, my father's very good friend, to make the motion to him, knowing it to be very seasonable for the good of himself and his children, there being little likelihood that she should add to his number he already enjoyed, because she never had any issue by her former husband, although she continued his wife divers years.

"I was first acquainted with this overture on Tuesday the 18th day of February, by my father himself; who being naturally marvellously inconstant, and inclining, as I also gathered, to some younger woman for his wife, had broken off this treaty before the Tuesday following, being the 25th day of the same month: whereupon I went the same day to his office, and remonstrated to him the convenience and fitness of this match in all respects, and how much it was desired by myself and sisters. Whereupon he gave me liberty to repair to the lady, and to bring on the former treaty again which had been abortively dissolved; which I did accordingly the same afternoon; and so having set it on foot again the second time, I followed it close with my utmost care and diligence, and by my persuasion with either party cleared many doubts and obstacles, amounting well near to a new breach.

"Yet my father still interposing new matters, did so weary me with the daily experience of his irresolution, and despairing of any further good issue, although the marriage-conveyance were well near drawn, and our Lent reading beginning on Monday the 3d day of March, I engaged myself in the performance of a moot, at New Inn, that day in the afternoon, where I argued the case with good success. The next morning I argued another law-case at another Inn of Chancery, with like success, though upon very little study; both which exercises I the rather undertook to free myself from further journeys and troubles in my father's wooing. But it pleased God to give such a blessing to my former endeavors, that all things being agreed on, and the deed of jointure ensealed on Wednesday morning, the 5th day of March, to my great joy and comfort, the marriage was solemnized, in St. Faith's Church, under St. Paul's; and then we dined and spent the residue of the day at the place where the lady had lodged, near Smithfield, all the time my father had been a suitor to her."

The perusal of these confessions will show that Simonds D'Ewes was not of a very vehement disposition or romantic cast: but something perhaps, should be placed upon the age, and a personal formality or quaintness. His notice of the deaths of his grand-parents, his mother and his children, show feeling if not sensibility; and though his letters on the death of his wife, (which took place in his absence, some years after the autobiography closes,) look like those of a lawyer inquiring the particulars or dealing with a case, there is no doubt but that he felt it deeply. His morals were unimpeachable, partly the result of temperament; his religion was that of the Church of England, inclining to the Puritans; but liberal for his age, although not always free from its persecuting spirit, and he had the censorious cast of mind which often belongs to men of strict conduct and straitness in religion. Except his grand-parents and his mother, who died young, he scarcely mentions anybody without hitting their weak place—if, indeed, he does not report gossip for fact—and with that mild malignancy which characterizes his class. Besides generally depreciating Bacon, and not perceiving his philosophical merits, he accuses him of an abominable propensity. His own family and father do not escape him; for, though he does not say so in terms, his narrative charges his father with cheating him out of the proceeds of his maternal grandfather's estate, to which he was left heir. Enemies or indifferent persons fare ill enough; and he handles an old friend, Cotton the antiquary, with little delicacy.

In editing the autobiography, Mr. Halliwell judiciously does no more than is really necessary; which many will think is doing little. The Correspondence that follows it extends from 1600 to 1649; embraces many subjects and many writers; and besides in a slight degree carrying on the autobiography, contains some curiously characteristic epistles. Mr. Halliwell has also added, from the Harleian MSS., a fragmentary "Secret History of the reign of James I."; though it is chiefly occupied with the fortunes of Carr Earl of Somerset, and the murder of Sir Thomas Overbury. This is followed by a reprint of Wynne's Relation of the Journey into Spain, when Charles went on his romantic courtship. The latter is a curious tract, and of original authority; the Secret History is twaddling, and too evidently based upon report to have much value. It runs somewhat counter to the received story; but its sources of information are obviously too doubtful, and the author to vulgarly credulous for weight to be attached to what he says, where he deviates, however slightly, from other accounts.

DR. HAMILTON'S ESSAY ON POPULAR EDUCATION.

From the British Quarterly Review.

The Institutions of Popular Education. An Essay, to which the Manchester prize was adjudged. By Richard Winter Hamilton, LL.D. D.D. 12mo. pp. 340. Hamilton, London, 1845.

Two years have passed since Sir James Graham abandoned the Education Clauses in his Factory Bill. At that time a liberal churchman of Manchester offered the premium of a hundred guineas for the most meritorious essay, on the best means of extending the benefits of education to the humbler classes of our people without aid or intervention from the state. Advertisements were issued; many valuable treatises were written; and to the essay at the head of this article the prize was awarded.

It is manifest, that the parties in this country who concern themselves with popular education consist of two classes—of those who believe that education is due to the commonalty, and that it will be in every sense a good both to them and to society generally; and of those who are more or less doubtful, if not altogether so, on both these points, but who, finding that the stream has set in this direction, yield to it, and become themselves educators, rather than see the work of popular instruction pass entirely into other hands. In the labors of this latter class, there is more of the partisan than of the patriot or the philanthropist—more of the sectary than of the Christian. But perfection is nowhere. The separate agency of every man includes, of necessity, a mixture of the wise and the foolish, the good and the evil; and what is true in this respect of the solitary man, is at least equally true of parties and communities. Nevertheless, though the agency in this case may not always be pure, the result must be good. Popular enlightenment may owe much even to envy and strife; but the general effect of such enlightenment will be social improvement. The age in which ignorance was regarded as the mother of obedience, and when it was fenced about and carefully handed down from generation to generation, as the guarantee for social order, is gone; and the most devout worshipper of the dependent, unreasoning passiveness of the former times, has nothing left to him, but to shape himself to the new course of things as he best may. Obedience he may still realize, but it must be by another process, and on other grounds. He may find it inconvenient that the multitude should have learnt to expect something more in return for their toil than to be housed and to be fed; but whether exactly agreeable or not, this sort of learning has come to them, and in future he must be content to deal with them accordingly. In the history of the question of popular education in Great Britain, we may see the vast importance of announcing right principles, and of acting in some measure upon them, whether the wise in their generation shall be disposed to hear or forbear. Let the principle be just, and the classes of men who abuse it now, will be constrained to adopt it ere long. Let the effort made be humane, Christian-like, and the men who traduce it for awhile as contemptible or mischievous, will soon be compelled to go and do likewise. Society, we regret to say, is often more indebted to the pride of parties than to their principles.

The history of Sir James Graham's attempt in the way of peace-making on this question, has placed protestant nonconformists in a new position with regard to it. They have not only declined the overture made by the state in the form proposed, but, as the effect of discussion, have become much more decided than previously in their opposition to state interference with the education of the people in any form. It should be carefully remembered, however, that having precluded the state from doing this work, it will behove them to see that it is done, and done at least as effectually by some other agency. They have never stood so committed to effort of this nature, either by avowed principles, or by circumstances, as at the present moment. They have said to the legislature, concerning this department of the public service, leave that to the nation—so leave it, and it shall be done. The census of education, in 1850, will, perhaps, show how far this has been the language of presumption, or that of a wisely regulated purpose.

In the mean while, the author of the volume before us has honorably acquitted himself in relation to this great duty. This essay is the production of a writer whose mind is stored with large knowledge, both of the past and present. His tastes have rendered him familiar with the history of art, literature, science, and society, from the remotest time to our own. The countries and the dwelling-places of the rude and the civilized in all ages live before him, and lend their pictures inexhaustibly to illus-

trate his theme. Over all these treasures, his understanding exercises a mastery which is at once refined and manly, discriminating and powerful. Nearly everything he touches takes the form and color which cultivated mind only could bestow upon it. Of his wit we say little, because, exuberant as it is known to be, it is rarely indulged beyond the circle of his friends. His efforts as an author have been almost restricted to the exercise of his graver faculties. We are disposed to think that he has acted somewhat too rigidly upon this rule; but if our lighter literature has been a loser from this cause, our more weighty questions have had the benefit. To Dr. Hamilton, there is little in the problems of political science, or of social economy, to produce bewilderment. He has confidence in man, confidence in himself, and is satisfied that the perplexities in human affairs admit of sufficient abatement to render life endurable, and, in the main, tranquil and happy. In human feeling, even in its humblest, its most neglected, it may be in its most despised form, he can separate between the precious and the vile—presenting the poor, in all their wretchedness and wrong, as the exemplars of virtues, in which their rich neighbors, if placed in the same circumstances, would often be found wanting. It is not in his nature to comtemn humanity. He can pity it—he can rebuke it, but he cannot think meanly of it. In its lowest state it is before him as an angel ruined. In its deepest degradation it has its signs of life, its traces of greatness, such as command reverence, awake sympathy, and warrant hope. How he has learnt thus to view man is manifest. He has himself sat at the feet of One who came to teach such wisdom. Our author is no stranger to the study of man as he may be seen amidst the splendor of Thebes and Babylon, of Athens and Rome; but it is as seen from Calvary and Mount Zion, from Sinai and Eden, that humanity assumes in his view its surpassing interest. The care evinced about it there, and the price set upon it there, are felt as wonderful. It is not for mortals to contemn the workmanship on which such value has been placed by the Infinite. Never does the language of this writer seem to be more appropriate to his conceptions and emotions than when partaking of that solemn or tender imagery which he so well knows how to borrow from the pages of the Hebrew prophets—the men who spoke to the infancy, and the early peoples of our world, in the name of its Maker. Their fine antique forms of speech, harmonize with the cast of his imagination, with his massy thoughts, and with his deep but controlled feeling. In the survey of universal history, his mind turns with its fondest, its most reverential bias, towards the course of such men, as towards the stream of light, which it should be pleasant to trace in its windings and inequalities, as it mingles with the shadows of our dark world.

But our words must not be all words of commendation. The more we find in an author to commend, the greater is the need to distinguish between his excellences and such peculiarities as may not be comprehended under that term. The characteristics of Dr. Hamilton's style are condensation and force; but these qualities are secured at the cost of verging continually on the abrupt and obscure. Give him one sentence of Coleridge, and he would break it up into a score. The former writer runs you out of breath; the latter checks you so perpetually as hardly to allow you time to breathe at all. The terse bits, shot forth, as it were, in the pages of Dr. Hamilton, are often admirable, and they sometimes come in a series, as though manufactured to serve as mottos or apothegms. To many readers this author must appear to write in the manner of a person who has turned with disgust from the smooth mediocrity of such scribes as Dr. Blair, and who has resolved to break in upon that wretched formalism by pushing an opposite style to extremity. 'Every sentence,' says Dr. Blair, 'should have a complete sense.' 'I demur to that,' replies Dr. Hamilton; 'I think it will be better given in half-a-dozen, provided always that my six consist of fewer words than your one.' But with all submission, we must say, that it does not appear to us strictly natural, that thought, any more than other living things, should be born piecemeal. Of course we account an abrupt strength as immeasurably preferable to an attenuated weakness; but there is a middle course here, as in most things. If the soft and smooth style may become distasteful, as resembling the gait of the effeminate lounger; on the other hand, the trenchant style may degenerate into mannerism, so as to resemble a strut or swagger, and thus be as little consistent with a gentlemanly or even with a manly bearing. We expect much when we require that men should allow us to lay down the law for them; we expect more when we require them to receive that

law from us in the shortest and most peremptory terms we can command for the purpose. Still more do we tax the humility and patience of these parties, when the terms we employ are so few as to leave our meaning uncertain. In some instances, it would seem to be the design of our author that his whole meaning should not be at once seen—that his sentences should present glimpses rather than full disclosures of his purpose. In the manner of the Greek orator, he appears to compliment his Athenian auditory, by intimating, that to minds of such culture, single words or hints must be abundantly sufficient. Unhappily, all men were not Athenians, and even Athenians were sometimes more concerned to be reputed wise than to possess wisdom. Nor is the language of Dr. Hamilton less remarkable than the general structure of his composition. His diction embraces the extremes of our mother tongue—words the most idiomatic and indigenous, harnessed to their office with others the most foreign and unfamiliar. His acquaintance with Horace has not prevented his becoming a student of Tim Bobbin. Words so erudite, and exhibiting such strange compounds and applications, as to perplex the most learned, come up side by side with forms of our Saxon speech so racy and ancient as to be rarely found now-a-days in books. Nor are these selections the result of accident. There is a wilfulness—a positive and a formed taste in what is thus done. The writer has a heart to give to all human interests and affections—whether home or foreign, whether of our time or of past time. On the whole, his writings are singularly adapted to furnish employment to that small breed of critics, who find their paradise in nibbling at words and phrases, and such-like matters. The comfort is, that the strength of Samson suffices to make a light affair of the withes of his enemies.

We doubt if there be another living writer who, in one sense, is so little understood by his readers. The style of Dr. Hamilton, both in the language and the form of it, is uniformly regarded by those to whom he is not otherwise known, as unnatural and vicious in an extraordinary degree—as the result of study and art, and as realized only by great effort. But we can assure such persons that, unnatural as composition of this order might be in another man, it is not unnatural in the author of this essay. In his case it is not so much a something learnt, as a something which we suspect he would find it exceedingly difficult to unlearn. If we mistake not, his thoughts and their costume are born together. His diction, his classical and learned allusions, and his grape-shot sentences, all bespeak, not the pedant nor the phrasemonger, but the man. In the language of his books, we see his vernacular speech—that which has been natural to him from his boyhood. Nevertheless we deem it a misfortune that these peculiarities should be so marked as to render it expedient that people should be told thus much.

Should any of our young divines be disposed to imitate the highly-gifted author on whom we have ventured to make these observations, we would say to them emphatically—beware. Let them not only remember that copyists are almost invariably imitators of the eccentric and the questionable; but let them be assured, before they assume the manner of Dr. Hamilton, that they possess his varied knowledge, his disciplined intellect, his power of imagination, his rich general taste, and his strong, healthy, and devout feeling; and then, if it were possible for such a man to be an imitator at all, even then let it be remembered, that what *is* nature in one man, may not *pass* for such in another, however perfect the resemblance. Dr. Hamilton is what he is, not by means of the singularities of which we have spoken, but in spite of them.

This essay includes ten chapters, under the following titles:—Preliminary Thoughts on certain Portions of our Population—On the Poor as a Class—On the Principle Divisions of the Laboring Community—On the kind of Education adapted to the Poor—On the Advantages arising from the Education of the People—On Sabbath Schools—On Foreign Systems and Means of Education—On the Statistics of Domestic Education—On the Parties Responsible for the Education of the People—On the Means and Resources of the Country to procure a sound Education for the People.

In the first chapter, our author expresses himself strongly against all fear of any great evil to the human family, from the multiplication of its numbers.

"The sacred volume has gathered up certain notations of this great study of our nature, which are worthy of their register. It points us to Him who 'enlargeth the nations and strengtheneth them.' It assures us that it must be on account of his anger against our

wickedness, if we multiply the nation, and withhold the proper consequences by not 'increasing the joy.' The greatest proportion of human beings to their earthly dwelling-place is always assumed by it to be a good, a thing to be desired. God, it assures us, 'made it to be inhabited.' He hath made of one blood all the nations of men for to dwell on *all* the face of the earth. Is the Parent described? 'As arrows are in the hands of a mighty man, so are children of the youth. Happy is the man that hath his quiver full of them.' Is the might of Thebes, with its hundred gates, proclaimed? It is 'populous. No.' Guarding with holy jealousy and fearful judgment every violation of purity, consecrating marriage as 'the true source of human offspring,' no man can be an intruder in the world. His birth gives right of place and provision in it. Parental sin may, in the opinion of society, throw a shame around him. It may be the wisdom of society to treat him differently from the home-born child; but what if no inheritance greet him? What if yearning and high anticipation have not hailed him? The genial fount of eternal nourishment was not denied the babe; and the joyless mother, in the sense of its undeserved wrong, has sometimes entwined it in only a fonder embrace. We need not fret ourselves with fears of too many guests at the banquet of nature. The prolificness of our kind has its own limits, and wants not our checks. He who bids the poorest has spread the board; he has established the proportion between the numbers and the viands. There is bread enough and to spare.'—pp. 3, 4.

Having reasoned, from this high authority, that it is not from the increase of population that the real welfare of society is likely to be invaded, Dr. Hamilton proceeds to contemplate 'the poor as a class,' and bespeaks an unprejudiced estimate of their claims:—

'It is too common—alas! it is too natural—to entertain a prejudice against this rank of our fellow-countrymen. They think that labor is their all. Is it strange that they should set high store upon it? They have learnt—they see that it is the spring of all value. Need we wonder that they do not underrate it? They cannot but have marked what appalling effects its interruption and withdrawment can inflict upon a community. Can we be amazed that they should sometimes wield this terrible power? In all these opinions, there may be the infusion of error and mistake; because, naked propositions seldom consist of perfect truth. Labor is not the poor man's all, but he has a vital benefit in the property around him, for otherwise, his labor could not command its reward. It is not the spring of all value, because its quantity may be so redundant that it shall be thrown out of demand. Its refusal may shock the operations of the mart, but it is a self-destructive experiment, generally inducing the depression of wages, or the abandonment of enterprise, together with alienations which no time can heal. But do the operatives alone take partial views of such questions?

'Now we can find in the pages of ancient history but little description of this class. It was overlooked and spurned. The priest only cared for it as it gave him dupes, the poet, as it furnished him satires, the monarch, as it raised him sinews. The people could not, however, be altogether gross and brutish. The veil is sometimes raised to allow us a faint glimpse of their habits. Their huts are seen, and their firesides exposed. Their foci are as dear to them in the battle as their shrines. We just raise their latch and look into 'pauperum tabernas,' and contemplate the scene, while 'arator gaudet igni.' In every negative in history, there is suffrage in their favor. Its silence is eloquent in their praise. Thinking upon their numbers, their rude forces, their formidable passions, it is impossible to deny them a large renown of virtues. Kindly affections built up their homestead. Contentment blessed their toils; resignation lightened their rigors; and though their religion was harsh and evil, yet its few ingredients of truth and morality directed and soothed their lives. There are many reasons to believe that the principal leaders of pagan philosophy were morally inferior to the people whom they despised.

'But whatever may have degraded or redeemed the character of the ancient poor, there gathers around *us* a stupendous specimen of this condition. On every side poverty, often mocked by the hope of employment, sometimes sinking into the despair of support, exist. We think of this class with grateful pride. Ah! were they more closely studied they would win our admiration! Then should we see the kindness with which they help one another under every ill. Then should we observe the hourly submission with which they bear unimaginable sufferings and privations. Then should we discover their indomitable industry and endurance. Then would there be revealed to us, not all the comforts which we can vividly fancy, but the struggle against a squalor which no fancy can conceive. Then would there be revealed to us, not all the order we might proudly desire, but a restraint of lawlessness, the temptation to which only poverty can understand. The house-side woodbine and window-plant declare the simple taste of elegance; the better suit of apparel indicates a sense of station and the duty of appearance. When parental authority cannot be exercised, how cheerfully is it committed to competent direction! If the children be for a time placed under the government of those who seek their welfare, how docile do they commonly approve themselves! Though manner be distant and reserved, how soon does a true charity warm it into confidence and gratitude! We suffer ourselves to wonder that long ne-

glect of the poor should have provoked their distrust—that frequent oppression should have goaded their resentment—that hopeless failure should have broken their spirit.

'The sympathy of the poor with each other, their availing kindness, their true-hearted tenderness towards all who are more needy and more sorrowing than themselves, form their characteristic trait, as well as impress upon them a high nobility. Where the store is so scanty, where the supply of the merest wants is so anticipated, where the sleep of the midnight hour is so compelled, an animal selfishness might be expected to betray itself. Shall poverty share its crust and divide its pallet? Shall it gather the children of famine, the benighted and belated stranger, the tempest-driven wanderer, around its crumbs and embers? Shall it attend on sickness? Shall it give alms to the blind and decrepit? Shall it pour its balm on the heart of helpless age? These are not its excitements; they are its traditionary usages, its holy superstitions, its very laws. And shall we despise those who thus bear one-another's burdens—who, weeping themselves, still weep for them who weep? Where else is this exalted philanthropy?

'The poorest poor
Long for some moments, in a weary life,
When they can know and feel that they have been
Themselves the fathers and the dealers out
Of some small blessings—have been kind
To such as needed kindness; for this single cause,
That we have all of us a human heart.'*

'The panegyric of the poet is just; his reason does not comprehend all the amiableness of the fact. It is not a 'single cause;' his is but one of many.'—pp.19–23.

The reader will perceive that there is a fine blending of philosophic thought, and of kindly and poetic feeling, in this passage, a little erring, perhaps, on the favorable side, but the understanding and the heart of the writer are alike true to the cause of our poor nature—for all are poor! It is from this cause that our author is not willing that the one-sided humanity of the Lord Ashley school of economists should pass unrebuked. He knows the misconceptions and dishonesties on which the pretensions of that school are, for the most part, founded, and he exposes them with a vigorous hand:

'It might surprise those who have only read a certain preparation of parliamentary evidence, who have received their impression of the manufacturing system from idle or prejudiced rumors, who take for granted that the children of the mill must be distorted in form and stunted in growth, who would expect to find the streets of the northern towns filled with spectres of famine and disease, with unsightly shapes and aspects—it might surprise such persons to enter the sabbath schools which there abound and flourish. Let them pass along row after row, let them pause at group after group. Where can children be found better fed, better clothed, better tended, more sprightly, more intelligent, more happy? Whit-Monday is the common sabbath-school holiday for these parts. Would that the maligners of factories beheld the spectacle! The health, the neatness, the joyance of that anniversary might strike them with shame and turn them to truth. It is a Pentecost to convince the gainsayer and the churl.

'The greater *happiness* of the agricultural laborer is affirmed; but so long as happiness is a general word, this assumption is gratuitous. To many, a brutal existence suggests the only idea of happiness, which would be interrupted and marred by thought and study. If they be right, every man is more happy as he recedes from the means and provocatives of intelligence—that is, as he become less and less the man. But the animal happiness of every day must mainly depend on the satisfaction of our natural cravings. And do we imagine that the skilled laborer is only doomed to struggle with privation, and that the countryman riots in fulness of bread? Where is this Arcadia of sylvan bliss? Where are the regions through which these Georgics sound? The peasantry of this country is very generally in a most degraded condition. Their food, their apparel, their lodging are much below those of the manufacturing vicinage. Or is happiness to be computed by liberty? We deny not that despotism is the temptation and abuse of power in all circumstances. But we are quite sure that if the proprietor of a mill were to attempt the exercise of his influence in the same manner with which landholders threaten their tenants, and tenants their servants, they would presently feel the impotence of their endeavor, and the ridicule of their position. It may be said, that at least the field laborer knows not confinement, but is refreshed by the breath and light of heaven. All this may be preferable, but it is a tethered freedom still; it is a drudgery in many of its duties which is not envied by the craftsman; it is an exposure to the skiey influences which might be often cheerfully exchanged for the mansion of mechanical art.

'They who are acquainted with the country life of England, its 'rural reign,' cannot fail to be surprised at the panegyrics which certain orators declaim on that class of its population. We speak mainly of the southern counties. We forget not exceptions even there; that population is ground down to the earth; it is well-nigh pauperized. We honoringly contrast its patience, its contentment, its cheerfulness with its treatment. Half fed,—and that often on a miserable pulse,—wages reduced to the lowest point of sustentation, through every

* Wordsworth.

hour hanging on abject conditions, every expression of personal preference in religion and politics scornfully denied, we may wonder at their forbearance. They are often cared for less than the clod of the valley, or the herd of the stall. Soils will be improved; breeds shall be perfected; stock shall be adjudged with honor; cultivation shall be assisted with every experiment, and be rewarded with every prize. And then, when some monstrous growth, some crass carcase, some field implement, has been lauded to the echo which applauds again,—a poor laborer is introduced, and he shares in the honors of the show, for having brought up so many children without parish pay! Nature and ingenuity have been racked in the other instances of success, and surely not less in this! It is an appropriate climax to the fête. An admiring district can scarcely determine where the greater glory of the invention falls.'—pp. 41–46.

The next extract brings out another point in this comparison:

'The question of the comparative morality of these departments is, of all, the most important. It is not to be decided by a glance. It is commonly taken for granted that the country is the favorite scene and haunt of the virtues. The cottier is the old Adamite, dressing his plot on the outer fence of Eden. The village green and oak might be the neighborhood of Mamre. Here simplicity has received no blight, and purity no taint. Pastorals fill the air, and the melodies of the brooks and woods swell the chant of native reeds. But there may be observers who yield to no such romance; they yet hold that, in the rural portions of the kingdom, there is a more spotless state of morals. Now, will it be contended that there is in them as exalted sense, as generous practice of morals, as is often demonstrated in our city marts! It is maintained that the vices of our towns are not rife in our villages? Perhaps the complaint simply respects the number of offences. Our country calendars must determine that. Then, do we feel bold in the argument, that the most numerous and most odious crimes come not from the towns, but from scattered hamlets and solitary dwellings. The quarter sessions, it will be said, dispose of cases that come from the towns, and they are not heard of in the gaol delivery of the shire. But these enormities, wherever committed, must go to the higher court. And are there not sessions for the counties, and the divisions of the counties, as well as for the boroughs? Let the truth—it is extorted from those who are impartial—be simply told. The proportion of criminals to every thousand inhabitants is higher in Worcestershire than in Middlesex, and is equal to that of Lancashire. Herefordshire exceeds Leicestershire. Dorset surpasses Nottinghamshire. The county of Oxford is on a par with that of Stafford. Does this account justify the transcendence of rural over municipal order and virtue? It may not be improper to throw a classical relief over the comparison. Where did the ancient mythology place its most monstrous forms? In the gardens, by the streams, among the woods. There reign Pan and Silenus, the Sylvani, the Satyrs, the Fauns. The Dryads are also there. They approach not the cities nor disfigure the towns.'—pp. 46, 47.

The Fifth Report of the Registrar-General, concerning marriages, published in 1843, shows the comparative state of education in the rural, and in the city and manufacturing districts. It is required that parties who cannot write their name shall sign with a mark. In Suffolk, Essex, and Cambridgeshire, there were forty-seven in the hundred compelled to sign with a mark; in Bedfordshire, forty-nine; in Herts, fifty; but in the metropolitan divisions, only eleven in the hundred. The inference from these facts cannot be mistaken. Of the kind of education which Dr. Hamilton inculcates, the reader may judge from the following passages:

'Any education is nearly worthless that is not intelligent. The mind must be aroused to think for itself. Mental digestion alone produces mental life and health. Violent efforts of the memory often discourage even that lower faculty without strengthening the judgment. Let children be taught the reasons of facts; and when this cannot be done, let it be shown how reasonable is the ground of conviction in their approved truth. Why is it?—how can it be?—wherefore do you believe it? are questions which will draw up the soul from its depths, and liberate it from its fetters. This is the true praxis of education. Self-knowledge, self-control, self-examination, self-culture, will follow as effects You have caused him who was created a thinking being to think; you have done reverence to the Father of Spirits in the evocation of that spirit.

'We feel that something is wanting to raise the national mind; it is oppressed by habitude and phlegm. We desire to bring it to a greater force and quickness; it stands in need of activity, perception, vigor. It has been long overborne by tyranny and besotted by ignorance; it has been bought by gifts and suborned by bribes. There is a natural love of justice and tone of generosity in it; it strongly inclines to independence, but it has been worn down by neediness and beaten down by rigor. It comprehends all the elements of greatness; it resembles some noble falchion capable of the keenest edge and the brightest polish, uninjured in its temperament even now, but blunted, soiled, threatened to be corroded by its rust. It must be awakened to exertion, and to greater confidence in itself; it must be drawn from the low amusements which have hitherto been its only recreation. It is ready for growth in know-

ledge, it invites, it even thirsts for education. Stimulated by that discipline which we inculcate, it will rouse from sloth; possessing the motives for improvement, its inborn energy will vindicate itself; it will stand forth in its vivacity without lightness, in its strength without violence, in its stability without grossness, in its activity without lubricity, in its ascendancy without disdain.

'It is almost unnecessary to say, that the instruction of the child is as nothing, save as you imbue him with the taste and furnish him with the means of self-education. 'Every man,' says Gibbon, 'who rises above the common level has received two educations: the first, from his teachers; the second, more personal and important, from himself.' Once inspired to think wisely and religiously, it is not very probable that he will relapse. Study will be his habit, and piety his inner life. Should he never rise in society he has already gained an honored and a holy position; he carries with him a blessed charm to lighten toil, to assuage affliction, to purify attachment, and to conquer death. He has been trained in the way in which he should go, and when he is old, he will not depart from it.

'We would, therefore, when certain writers urge moral training, admit the idea, but at the same time greatly expand it beyond their ambition. We see clearly that education has hitherto scarcely touched the spiritual good of man; the higher principles of Christianity have found little access to the people's heart. In them is the power which is now wanted to regenerate society. General discipline may do much for the public mind, and even public morality, but there it stops; it leaves the real nature of man the same; something more is required to stem the eager passions of its selfishness. Are the masters always the true reformers of the soul? Do not the Titans assail heaven? Is mental process the invariable guide to virtue and piety? Is infidelity the mistake of the ignorant? Is war the exclusive delight of the rude? Is there not now an intense activity of mind laboring with all the prodigies of evil? But in the gospel we possess the instrument which called into existence the first Christians. It is eternally the same; yet, with an ever-adapting faculty, it anticipates the wants of each social condition. It belongs to all truth and all goodness; it is the inheritance of every age; it is the friend of man in his every estate; it works by an assimilating action; it turns all into itself. What would a nation of Christians be? What would be a world? That is the ultimate design, that the blessed reward, that the glorious victory, of true education!'—pp. 84–86.

The chapters on the advantages of popular education, and on Sabbath schools, contain much valuable matter; but we pass on to those relating to the foreign systems and means of education, the state of education in this country, and to our consequent duties. In France, the schools instituted by the government, exist in thirty-three thousand communes, or parishes, out of thirty-seven thousand, in which three millions of children are educated. Where practicable, separate schools exist for catholics and protestants; and where the schools are mixed, the best available provisions are made to secure the rights of conscience from invasion. There are also forty-six royal colleges, in which a higher education is given, including some eighteen thousand students; and two hundred and eighty-seven communal colleges, in which there are more than twenty-six thousand students. In 1842, the government voted £80,000 towards the expenses of these colleges. Attendance of children at the primary schools is voluntary. Even now, however, about one-third of the people of France can neither read nor write. The Prussian system covers its territory more completely than the French, and is compulsory. In all other respects, France has followed the example of Prussia. Systems of this complexion obtain, with slightly varying degrees of efficiency, as is well known, in Austria, Switzerland, Holland, Belgium, Norway, Sweden, and the United States. Everywhere they are substantially the same, subject in part to local management, but holding the same relation to a central government, which enjoins their existence, and authorizes the taxation necessary for their support. In six of the states of the American Union the proportion of the population under instruction rises so high as one-fourth. In an average of eight of the countries the most advanced in this respect in Europe, the proportion is one-sixth. From the 'Report of the Hon. and Rev. Baptist Noel,' printed in the 'Minutes of the Committee of the Council of Education,' relative to the state of education in Birmingham, Manchester, Liverpool, Salford, and Bury, we think it may be made to appear that about one-sixth of the population in those five towns, do receive some kind of school instruction. But if we may be allowed to take those five towns as a sample of the kingdom, it must be remembered that the term, 'instruction,' as relating to the eight states on the Continent, is to be understood as referring to the full training of the day schools, while with us, this number of the taught must be made up of all who come under instruction in any form or degree, from the lowest dame school, or mere Sunday instruction, upwards; not more than a fourth of this number being

attendants at the elementary day schools designed for the working classes. Comparing ourselves with the continental and American states adverted to, we cannot be said to place the same number under instruction; but in the amount and quality of the instruction given, we fail much more than in the number of the taught, few being educated in our elementary schools in so good a degree, so far as the usual elements of school learning are concerned, as in the schools of the same class in most of the states referred to, both in the old world and the new.

On the whole, it must be confessed, that in this comparison, the scale turns, and somewhat strongly, against us. Two causes preclude our adopting the continental system—the exclusiveness of our national church, and the more advanced social intelligence and feeling of our people. No system, we think, could be made acceptable to this nation which should be so adjusted as to satisfy our established clergy. And if that difficulty could be removed, the power of the government among us is still so formidable, that many calm and thoughtful men cannot avoid the conclusion, that the remedy, as coming from that quarter, would be worse than the disease. It might cause a greater degree of school-learning, but might occasion a loss of many things, which are more excellent. On this subject, however, we prefer that our author should speak. He would vest the responsibility of educating the young in the parent, and not in the state. He contends that this is the law of Revelation, and that, as a rule, the parent is better fitted and better disposed to the discharge of this duty than the state. We counsel those who may be inclined to despise his reasoning on this ground to attempt to grapple with it. In the following extract the reader may trace the drift of Dr. Hamilton's argument on this subject:

'National education does exist in many of the continental states. It has operated long enough for its decided effects to be seen. There is abundance of organization: there are grand referendaries; there are portfeuilles and bureaux. Local check is unknown; self-government is repudiated; all hangs upon one centre. Let us examine the great scholastic regimen of France. There is a minister of public instruction; he is the master of the university, which is the keystone to the whole edifice of education. It has dependent upon it, academies, royal colleges, commercial colleges, institutions, pensions, primary schools. A royal council assists the minister. The seven functionaries, of which it consists, divide the faculties and departments of education among them. Under them are the inspectors-general. Then the heads of the academies are constituted over their respective provinces. All is detail and surveillance; there is nothing which can elude the jealous care of the most balanced system. But freedom is sacrificed on the elaborate altar; teacher and pupil cannot know it. The school is the ward of one great panoptic prison-house, with the keepers before the door. The work of Professor Lorrain gives a deplorable account of the state of things. He was one of the four hundred and ninety inspectors sent forth by Guizot to examine into the primary schools. He proceeds upon their general reports. The tale is almost incredible of the miscreants who were called schoolmasters, and the hovels that were called schools. The incapacity, the vice, the squalor, the audacious dissimulation and deception, nearly surpass the power of belief. The moral influence is too apparent. It is the characteristic of the brave and free to rest upon themselves. The desire of the true patriot is in everything to circumscribe the province of government, where it can be done by extending the sphere of individual action. In our country, the loan of the state is generally deprecated; we would allow nothing of our commerce or our undertakings to fall into its hands. But when education is resigned to it we are henceforth children; the mind is discouraged and debased; we consent to receive our ideas, and those only, which are minted with a royal device. We are under tutors and governors. Self-reliance, the soul of virtue, the talisman of success, is beaten down. France is infidel or superstitious at a bidding; generation is a conflict with generation as the educatory machine is set. The nation looks up for its direction to the existing ruler or government; it can, therefore, only be in bondage. It is not the people, but that power. That power is a great deputation to do everything. And why is this? Because the mind of the nation is made prisoner, and led captive by the training which it meets at the outset of life, which binds it to uniformity, impresses it with helplessness, and satisfies it with dependence. Hence the absence of enterprise, the dearth of large and stirring views, of great and far-seeing principles. The quarrel of the people may be with the government; *emeute* may shake it, or revolution may overthrow it, but they keep to the one idea, the one idol of the government still. The high-souled reform of the nation, the regeneration of the people, enters not into their thoughts. They think themselves free, but it is in the sale of their freedom. They capitulate to a system of egregious vain glory; for empty honor and pageant, they lay down their arms and abandon their garrisons. They may find out in time their folly. It will not be long before they see how 'men ride over their heads.'

They have bowed themselves to the despotism, and they must not complain that it tramples upon them. Like *other fortifications*, they will at last learn that educatory bulwarks are for their own intimidation. All will be turned against themselves. We have a hundred governments in England; if they do wrong, the tribunals proscribe and punish—but with one much-grudged exception, (save that of the registration, which requires a central safe-keeping and archive,) centralization, that subordinate ramification which gives to a Parisian board its national ubiquity, is unknown to us.'—pp. 239-241.

The Prussian system finds no more favor with our author than the French.

'The education which is established in Prussia is a theme of very wide and vehement eulogy. It has been exalted as a model of perfection. The best, the only safeguard of liberty, is hitherto withheld. The constitution which was promised, when a popular spirit was to be awakened, which was the signal-cry for levies of youth and treasure, is still perfidiously and ungratefully refused. The last and the present monarch have borne their faculties meekly, and have exhibited many amiable virtues. But poor and to be accursed are 'the virtues which undo a country.' The private excellence and domestic goodness of the despot are not uncommon. His nature must have some vent of tenderness. Wielding a mighty machinery of oppression, it is not likely that be will carry cruelty and violence into his home. It is a respite of self-torment to find here pastime and caress. It is relief from the heavy powers of state. It is only a variety of selfishness. Who commends the lion, as it devours its prey, that it is loving to its mate, and playful with its cubs? No more dire misfortune has fallen on man than this amiableness of tyrants. It often is pretence. Better were it to be so. Often it is real. It is then pleaded for excuse to crush millions of families, to send desolations through millions of households. A Nero and a Caligula could not do half the mischief of a William and a Nicholas. What is this country of which we speak—this kingdom of boasted light—this land of universal education? A camp of manœuvrers, an arsenal of weapons, a barrack of troops. All are trained to military service. Upon this martial regulation is founded the system of instruction. It supplies, of course, immense facilities for it. A thousand subalterns are ready to conduct it. Pedagogues are the orderlies and sentries. The drum and the drill are the notions and exercises. An elementary education, very complete as far as it goes, is confessedly afforded. But what is the national character which it can shape? It severs the proper sympathies of parent and child. It extinguishes the proud consciousness of free agency and personal accountability. It raises mind to one level—it as often sinks it to the same. A dull monotony succeeds. To this is a noble people made slave and victim. What high deeds can such discipline provoke? Where are the excellences which this culture can inspire? They who anticipate the reign of mind and religion, can see in all of this mechanism, no preparatory process, no encouraging earnest, no prophetic hope!'—pp. 242, 243.

We have been more free than usual in our extracts from this volume, partly that our criticisms on the style and manner of the author may not go forth without suitable and sufficient illustration; and partly in the hope that our readers will be disposed by these specimens to make themselves acquainted with the entire work. In a volume embracing so great a variety of topics, and topics on which there is so much room for diversity of judgment, we shall not be thought to concur in everything we meet with. The coloring is sometimes partial; and positions of some peril are occasionally taken, as we think, with more resoluteness than discretion. But, as a whole, the publication is admirable. We conclude by recommending it, not merely to the perusal, but to the meditative thought of our readers. It is a work characterized by sound information, large views, and close reasoning; and in the eloquence which pervades it, bespeaks equally the philanthropy, the patriotism, and the piety of its author. But the friends of a self-sustained popular education must remember, that their work is not done because eloquent things have been written about it. Nonconformists, especially, will do well to bear in mind, that their responsibilities in relation to this subject are the most weighty that Providence has ever laid upon them. Their social position in the time to come will depend greatly on the manner in which they acquit themselves with regard to this duty.

BULWER'S MUSCLES OF THE MIND.

From Frazer's Magazine.

"Is there an art
To find the mind's construction in the face?"

We have all heard the anecdote of Socrates and the physiognomist, which in our opinion, however, proves nothing but that the latter had not got beyond the rudiments of his art. Being asked to decipher the

face of the wisest and most virtuous of men, he could discover nothing in his features but folly and vice. He imagined—for we cannot accept the excuse of Socrates for him—that deformity of visage necessarily indicated deformity of mind, and could not detect the expression of the saint beaming forth from the coarse *persona* (*πρόσωπον*) of the man Socrates. The ancients indeed generally, in their treatises or scattered observations on physiognomy, seem in a great measure to have sought for indications of the mind's character from those parts which were most likely to resist the impressions of passion and the plastic operations of the soul. Hippocrates and Aristotle, among others, lay more stress on the conformation of the nose, the size of the eye, the greater or less protuberance of the forehead, the color of the hair, than on the subtle variations of form which distinguish one mouth, for example, from another; and they have not been without their followers in modern times. Gaspar Taliacottus, whose wonderful achievements are celebrated in *Hudibras*, and who ought to have known something of noses, since he made a good many with his own hands, appears to have imagined that his favorite feature was the palace of the mind, whose shape could be ascertained, like that of an ankle through a silk stocking, by the most cursory inspection. A nose with a sharp edge, he says, indicates aptitude for anger; a thick and depressed nose denotes most vicious inclinations; a full, solid, and obtuse nose, like that of lions and Molossian dogs, is a sign of courage and audacity; a hooked and aquiline nose reveals a royal and magnificent mind, but a crooked soul is betrayed by a nose that is bent and on one side. These, and such as these, are the conclusions to which his nasal studies led Taliacottus, who doubtless assisted in forming the theory of Walter Shandy, Esq. However this may be, we must venture to dissent *toto cælo* from his conclusions, especially as such a theory pushed to extremes might lead to very serious consequences. Already has the sage Valesius, in his *Sacred Philosophy*, proposed to introduce the science of physiognomy into the courts of law. When two persons accused of crimes, he says, are brought up before a judge, let him unhesitatingly select the most ill-favored of them, and put him to the torture: there is no doubt about the matter; rack him till he confesses—he is the villain; woe betide the morning that he was born with so ugly a face! We beg to appeal from the decision, and can scarcely allow even Lavater himself to be a good substitute for a jury of twelve stupid honest Englishmen.

In spite of all this, however, we maintain that the language of the passions is written upon the countenance; that its character, though obscure, indeed, and known only like the Egyptian hieroglyphics to a few, are not perfect enigmas; and that Gregory Nazianzen, in painting the expression and gestures of Julian the Apostate, furnishes us with ample materials for forming a conception of the construction of his mind.* But to understand this language it is necessary to be acquainted with the alphabet in which it is written; not merely to glance at the letters on the page of the human countenance, which would be like attempting to discover the mechanism of a telegraph by seeing it work, but to take them one by one, analyze their nature, study their conformation, and attain a clear idea of the force and signification of each.

These letters are what Bulwer calls "the muscles significative of the affections of the mind." They have one peculiarity, which is, that when they have been often disposed in a certain order upon a face, they have an aptitude to assume that order once more. For this reason, a countenance which has been accustomed to represent certain passions acquires at length from this circumstance what is called an expression; that is to say, the animal spirits, if it be the animal spirits by which the effect is brought about, wear themselves a beaten path, an habitual state is induced, and the more flexible features at length constantly represent the favorite posture of the mind. Idiots have no expression, because they are very rarely intent for a sufficient length of time upon one object. Their vacant stare reveals accurately the character of their thoughts.

Bulwer is of opinion——but who is Bulwer? Not a baronet, certainly, nor the author of a dozen novels? No. John Bulwer, son of Thomas Bulwer, was surnamed the Chirosopher, and wrote a book "now seldom pored on," entitled, *Pathomyotomia; or, a Dissection of the Significative Muscles of the Affections of the Mind: being an Essay to a New Method of Observing the most Important Movings of the Muscles of the Head, as they are the nearest and immediate Organs of the Voluntary or Im-*

* Hist. Eccles. iii. 19.

petuous Motions of the Mind, with a Proposal for a New Nomenclature of the Muscles. This preface in a title-page was printed by W. W. for Humphrey Moseley, in 1649, and was to be sold, along with the book attached, in his shop at the Prince's Arms in St. Paul's Churchyard. It is succeeded by an epistle dedicatory, in which the author, addressing his loving father, the aforementioned Mr. Thomas Bulwer, informs him that he will find in it, "The clockwork of the head, or the springs and inward contrivance of the instruments of all our outward motions, which give motion to and regulate the dial of the affections which nature hath placed in the face of man; being a new light and the first irradiation which ever appeared through the dissections of a corporeal philosophy." He then informs the world that he had intended it to have been "illustrated with the ornamental demonstration of many figures prepared for it;" but the stationers objecting to the expense, he finds another reason to satisfy himself, which is, "that in such new and unexpected matters too great a splendor might possibly have dazzled." He adds that he had met with little encouragement in his design, all the physicians and anatomists to whom he had given any hint of his theory having thought lightly of it, except Dr. Wright, jun., who had planned an *Anatomia Comparata*, suggested by Lord Bacon in his book *De Augmentis Scientiarum*. This learned person incited Bulwer to proceed with his design, promising to afford him every facility, but death put a stop to his career; a circumstance regretted, says his friend, "by all who had took notice of the most eminent and divine impulsions of his anatomic genius."

But this accident did not prevent the Chirosopher from prosecuting his design; and he accordingly continued to direct his studies towards physiognomy.

"Having resolved," he says, "to trace the discoursing actions of the head to the spring and principle upon which their outward significations depend; when I had passed the superficial parts and digged a little more than skin-deep into the mineral of cephalical motion, I came to the muscles, the instruments of voluntary motion (or the instruments of those motions that are done by an earnest affection, that is, from an inward principle); the effects of whose moving significantly appear in the parts moved, when, by an arbitrary motion, we freely *reject or embrace* things understood, not with our mind only, but with our mind and body both."

"Here," adds our author, "I made a stand;" and well he might, for it is necessary to be not a little versed in the learning of the schools to detect in the concluding clauses an allusion to the theory of those who maintained that all our passions are but modifications of desire and aversion, love and hatred. Bulwer's object, however, was not to elucidate this point, but to complain that, "among all the conscript fathers of anatomy," no one had undertaken a general survey of the muscles of the human body, with a view to an accurate estimate of their importance in expressing the passions of the mind, and to the construction of a nomenclature founded on philosophical principles. Galen, he says, in that excellent work on the *Motion of the Muscles* ("wherein he went beyond himself, and shewed the greatest miracle of his art; a book which all anatomists kiss with veneration, as containing the oracles of myology"), doth not so much as glance at it; and the writers in modern times on anatomy have almost universally evaded any allusion to the soul, "whose well-strung instrument the body is." Dr. Hood alone—so says Bulwer—in his peroration when he was Prælector of Anatomy in the College of Physicians in London, A. D. 1620, sketched out a method in which "the internal and spiritual man, which is rather to be dissected with living words than any knife, how sharp soever," was to form the subject of an "anatomical præludium." Could it have been to this expression that a more modern professor alluded when he declared his disbelief in the human soul, because he never met with it under his scalpel? At any rate, Bulwer determines that it is "a thing worthy to be corrected with the whip of ignorance, if any rashly plunge himself into the muscular sea of corporeal anatomy, or of the outward man, without any mention of the internal man;" and resolves to attempt something in this way. Among other achievements, he proposes "to take away the blemish which hath fallen upon the art, by the slovenly and careless denomination of some of the muscles, and the six-footed barbarisms of those Greek conjuring names, which are fit only for the bombastical anatomy of Paracelsus." What he proposed to substitute was a series of appellations derived from the significative nature of each muscle. To attain this, he determined to examine the nature of those muscles of the head which could be supposed to express a meaning, and which enable one, as it were, to touch and feel the inward motions of the mind. The construction of

a convenient nomenclature, however, was by no means his chief object. In bestowing significant names upon the muscles, he desired to enable us "to read their significations couched in their names;" and assist us in finding out, by a scrutiny of the accidents of the head and face, those of the mind, of which the former are types and representations. It is evident, therefore, that he considered his work as a contribution to the science of physiognomy; and so indeed it is.

For a man to be ignorant, he affirms, of the manner in which the motions of the head are brought about, is "to have no better a headpiece than that which, counterfeiting the natural motions of speech, uttered its mind to Thomas Aquinas, the learned Friar Bacon." He might have proceeded, "or than that which in Saragossa, to the inexpressible perplexity of the knight of La Mancha, and the wonderful amazement and horror of his squire, did converse of things past, present, and to come." As for his own conclusions on the subject, he professes to offer them very modestly to the world, acknowledging that ere they are made canonical it will be necessary to assemble a whole college, or rather a national synod of anatomists. Still, he maintains that he has sprung a new vein; adding, however, "If they are contented to allow me to have been the first that by art endeavored to link the muscles and the affections together in a Pathomyogamia, or, at least, to have published the bans between Myologus and Pathology, so that any philological handfast that can marry them stronger might do it if he pleased, I ask no more."

Before proceeding to details the Chirosopher breaks up some metaphysical ground, and starts the question, Whether the motions which, appearing on our countenance, become symbolical of the affections of the mind, are voluntary or involuntary? "Physicians," he says, "call that an animal or voluntary motion which is made by preceding knowledge, either of the intellect or imagination, whereby the motive faculty is excited, that it may move the members after divers manners, according to the diversity of the appetite." With this opinion our author in the main agrees. We ourselves, however, have been accustomed to divide animal motions into voluntary, instinctive, and passionate. It is true that all these can be brought under one head, and referred to a common origin; but, for practical purposes, the division we have adopted is the most convenient. At any rate "animal" and "voluntary" are by no means convertible terms.

Voluntary motions are the result of election consequent on a kind of mental soliloquy, of which the form is, "To do, or not to do, that is the question." They are of two kinds; the one the result of deliberation immediately preceding, the other of former deliberation which has produced a habit. Under the latter head should, perhaps, be ranged many actions which are improperly termed *instinctive*. For example, we raise our hand to ward off a blow, from a habit acquired by precedent experience of pain; and all may observe in children, that they are very far from having any instinctive fear of what will hurt them, until by frequent trials they have acquired a sort of rough criterion by which to distinguish danger from its opposite.

It is certain, however, that Scaliger,* the Master of the Subtleties, is right, when he reproves Cardan for assigning custom as one of the fountains of muscular motion distinct from the action of the soul; for nothing that has not a soul can acquire a habit; the existence of the first is an essential condition to that of the second, which, therefore, cannot be the primary cause of any muscular motion.

"Custom, indeed," says Bulwer, "and the aptitude of parts, do advance and help forward the doing or perfecting of some motions; and it is worth our admiration to see how in a Chironomer, who has his soul in his fingers, the muscles of his hand should be directed, so swiftly to the nerves of his instrument, while it may be he is afflicted in mind, his hand being driven by the command of his will to such motions, all the ready variations of his cunning fingers being done by the nods of his soul, though unknown to him—unknown by reason of long custom, by which such actions become most easy."

Bulwer rejects the supposition that we perform any motions whatever instinctively; that is to say, without co-operation of the soul.

"We do not always mind the motion," he observes, of every particle in our head and face, yet all the gestures of the parts which we exercise, even when we know not whether we use them or not, are motions of the soul, since performed by the work of the muscles. 'And I think,' saith Marinellus, 'there is no man when he moves after any manner his whole head, distorts his face, eyebrow, lip or nose, or winks with one eye, which actions

* De Subtilitate, 99, p. 339.

sometimes we do, not being aware of them, and so against our knowledge and will; yet none are so simple to think they are not the actions of the soul, and done by voluntary motion."

But how that can be done by *voluntary* motion which is done "against our knowledge and *will*," Bulwer and Marinellus explain not. Certain it is, that the winking of the eyes is so far from being a voluntary motion sometimes, that it is done against the express desire of the will on the approach of any outward object to too great a proximity. And Noctambuli or Somnambuli, whatever Sennertus may say, cannot be believed to perform all their motions voluntarily.

The passionate motions of the countenance are of a very different nature. But they cannot be called voluntary, because it is only the most consummate politicians, men of the world, and actors, that are able in any wise to restrain and regulate them. Can any one believe, that in the ordinary circumstances of life the will is necessarily exerted to produce a smile, or a frown, or those other slight and evanescent motions which pass over the countenance like a ripple over the surface of water? There is an anecdote told of Mademoiselle Clairon, by Herault de Sechelles, which will illustrate this subject. On one occasion, he says, she sat in a chair before a numerous audience, and painted in succession upon her countenance the whole series of passions, with all their various shades and modifications. On being asked how she accomplished this difficult task, she replied that she had made a special study of anatomy, and thus knew what particular muscle to put in requisition in order to express a certain passion of the mind. But this was evidently a little bit of *charlatanerie* on the lady's part. For, the same muscle assisting frequently in representing many and opposite passions, it is evident that no scientific knowledge of anatomy could endow her with the power she possessed. We must rather believe, that by the mere force of her imagination she was capable, in common with other great performers, of rousing for a moment in her mind the passions she wished to represent. Without this, the mere play of the muscles would have been but a convulsive caricature; with it, no anatomical knowledge was necessary, the expression of the countenance attending involuntarily and almost invariably on the passions of the soul.

This reminds us of a very extraordinary proposition put forward by Descartes, in his work entitled, '*Les Passions de l'Ame.*' He maintains, that the symbolical signs of our passions are purely arbitrary, that is, that they are habits of our body, connected by mere accident in infancy with certain emotions of the mind,—an opinion evidently formed on a very superficial observation of a particular phenomenon, namely, that some men—in anger, for example, or any cognate passion—turn red, while others become pale. Had he here applied, however, his own beautiful theory of the composite nature of the passions, he might, perhaps, have accounted for this fact in a far more philosophical manner, by supposing that in one case a greater amount of some particular affection of the mind was mingled with the pure passion of anger than in the other. As it is, he falls into what appears to us a very absurd mistake, namely, the supposition that it is possible that the same accident should determine, in all the human species, that the contraction of the brows, which we denominate frowning, should accompany the passion of anger, and so on.

To return, however, from our digression. Bulwer, in search of the cause of muscular motion, finds it in what he calls "the animal faculty, which gives sense and motion, which suggests cogitation, intellection, and memory, and which transmits sense and motion from the brain by the conduct of the nerves, with the Greeks usually called λογίστικη, that is, *rationatrix*, presiding over all the actions and motions that flow from our will, that is from election and council." This is a lengthy descriptive definition of the principle of our existence, and the source of all our actions, and seems to suggest a very material mode of viewing man's nature. However, we are not much the wiser when we learn that of this "animal faculty" the "motive faculty" is a species, which, among other effects, produces those which paint on the surface of the body the inward agitation of the mind.

All the effects of this faculty, Bulwer, as we have said, esteems to be voluntary. He cannot suppose that any impression made on the mind should rebound, as it were, and become manifest in the body, without the exertion of the will. Nor can he understand that the motions of the countenance should exist for any other purpose than the gratification of some appetite. We grant that men employ their countenances in expressing love and hatred, and in producing

pleasure or pain in the minds of those that behold them; but we still maintain that they do this as often, at least, involuntarily as voluntarily, and that, in the latter case, they are imitating the involuntary motions of themselves and others.

We cannot refrain, before quitting this subject, from alluding to an extraordinary notion advanced by Galen. He inclines to the opinion that all our motions are voluntarily performed, but is withheld from making a dogmatic assertion by observing that infants move and are yet ignorant of the offices of muscles. He might as well have been staggered by the fact, that all men besides anatomists are not immovable. For if knowledge be required to precede motion, it is not a knowledge of the mechanism of the muscles, but of the end to be attained. But this did not suggest itself to Galen, who asks how it happens that infants, who are ignorant of the "peculiar instrument of motion," should rather move their lips than their feet? He proposes to solve the difficulty by the supposition that it is not we, after all, that move our muscles, but that when we desire to do so, God is present to assist us!

But we have lingered too long amid these quaint, general speculations. Let us leave the examination of the differences and resemblances of spontaneous and voluntary motion in the hands of Picholhomenes, Nancelius, Archangelus, and Riolanus; and, taking for granted that there are seven parts in a muscle, descend at once to particulars. Bulwer's object in applying himself to "the virgin philosophy of gesture" was, as we have already hinted, to enumerate and methodize all he knew of the outward workings of the mind in the body. An idea of the importance he attached to the research may be best conveyed by the following extraordinary speculation:—

"If we could conceive in our mind all the organs of motion taken out, we should leave few parts to remain, and you would not acknowledge man to be a living creature; and that not only in regard he is depraved in his structure, but because he hath sustained a greater loss in being deprived of his motion. For were the abilities that proceed from motion and its instruments separated from the body, without doubt man would almost cease to be a man, and would degenerate into a plant or stock, whereupon you could no more observe those motions of the muscles which are necessary to life; for he could neither follow that which is wholesome, nor avoid what is noisome. He would be left destitute of the grace of elocution, and his mind would be enforced to dwell in perpetual silence, as in a wooden ecstacy of congelation,—nay, his soul, which is only known by action, being otherwise very obscure, would utterly lose the benefit of explaining itself, by the almost innumerable motions of the affections and passions which outwardly appear by the operation of the muscles. * * * * * * *

"Man," continues our author, further on, "who, in respect to the variety and excellency of his actions, is a most perfect creature, has a body withal composed of divers parts, answerable to the variety of his actions, and every way fitted to signify and explain the affections of his mind; among which, the most eminent and obvious part, the head, wherein the whole man seems to dwell, hath a prerogative in point of significative motion, and, being the forum of the affections, hath many advantages for declarative action of the subordinate and more private parts of the body. And all this by a good right, as being the root of the affections and the principle of motion. Hence the instruments of voluntary motion, the muscles, disposed in the head or face, are so honorable and remarkable, that if man were deprived of them he would look like a Socratical statue, for his face would be always in one fixed posture. There might be *facies*, but no *vultus*, or voluntary explanation of his mind. It would be like a cabinet locked up whose key is lost. No certain way of entrance into his mind being to be found, Momus his cavil would be just; all the inward motions and affections of his mind would be obscured in silence, and become altogether invisible; the countenance, without the moving virtue of the muscles, ordained in time to measure out the passions and affections of the mind, remaining like a watch, whose spring or principle, and the wheels that served for motion, were taken out."

We have, soon after this, an enumeration of the motions of the head—in a place, from a place, to a place, and by a place, "when its potential abilities of signification are reduced into act, by any affection or pathetical motion of the mind." The most obvious of these motions are the most complex, which are perceived before we notice the simple motions of which they are composed. In a nod, for example, we first notice the inclination of the head, and then the contraction and extension of the muscles of which it consists. "Some of these instruments and their motions, in lean and muscular men, do evidently appear without any dissection through the veil of the skin."

Bulwer now enters into anatomical details concerning the muscles by which the head is swayed in its movements, and then develops the philosophy of nodding, which action, he says, expresses "the yielding flexibility of the will." In this manner we

assent, affirm, yield, grant, vote, confirm, confess, admit, allow, and approve of a thing, as a witty saying, for example. It will be impossible to descend into the minute investigations into which our author plunges, in his endeavors to determine the true value and signification of the various kinds of nods, tosses, and wags of the head. We can only observe, that he attributes the constant paralytical shake of old men's chins to a perpetual state of uncertainty between assent and denial, which we suppose must be understood allegorically; and that he makes some curious remarks on the turning away of the face by rustics and shamefaced people, as well as by those who are suspicious, and said, according to the Spanish proverb, to wear their beards on one shoulder.

"Light displeasure, also," says he, "makes us shake our heads, and cast it into a sort of ague of distaste; which gesture we also use when we disallow, chide, forbid, rebuke, condemn, doubt, lament, condole, repent, &c.; and is nothing else but a slow and definite trembling, and an effect arising from the same cause that (ordinary) trembling and horror do, namely, from the retiring of the spirits, but in a less degree. The muscles by whose operation this important motion is produced are the oblique muscles of dislike, moving reciprocally by short turns, and so multiplying the single motion of oblique disallowance into a redoubled and more ample circle of distaste. The quick succession of the same oblique muscles of one side working alone, and their fellows on the other side taking it by turns to maintain the rotation, accomplisheth also that motion of the enraged and frantic mind which wheels and swings about the head in a voluntary and giddy vertigo of frenzy or bacchanalian fury."

In the tenderness of love and supplication, as well as in grief and languishing of the mind, the head is bent down laterally on one side, as the Ghost of Hermione is described in the *Winter's Tale*.

"The intimations," says Bulwer, "that are exhibited by this lateral motion of the neck have no peculiar muscles assigned unto their action, there being not particular and private muscles allowed to every motion of the mind energetically working out its signification by the motion of the head."

Shakspeare, in the passage alluded to above, represents Hermione as now hanging her head to one side, now to another; but Baldus and Bulwer observe that on these occasions the head inclines rather to the right shoulder than to the left, and adduce many acute explanations of the phenomenon.

Much of the amusement of Bulwer's work is derivable from the most extraordinary and quaint expressions and similes he employs. He discusses the arrogant and elate bearing of the head aloft like a ship's mast upheld by the rigging, the "voluntary crick of stiff-necked cruelty," and "the chameleon-like expression" of shrugging, which he calls also a "dive-dopper, or dob-chick of the mind." By the way he starts a curious discussion on the monk's hood, thought by Vesalius to have derived its origin from the muscle *trapezius*, sometimes called *cucullaris*, and compared by old anatomical writers, now to a maid's coif or kercher, now to "the clout which the women of Cremona wear upon their shoulders." Bulwer, not satisfied with these similitudes, denominates it "a monk and tacit confessor of the living monastery of Mount Cephalon, and of the Order of Nature." From the *trapezius* he passes to the *serratus*, and, to use his own expression, "follows the unhappy hint of another allegory," which we cannot repeat.

This, which is an outline of Bulwer's first great division, will give some idea of his mode of handling the subject. He discusses in the same manner the motions of the forehead, brows, ears, nose, cheeks, lips, and eyes. In the various sections devoted to these subjects we find the whole theory of nose-wisdom, snorting, winking, pouting, mocking, kissing, gaping, yawning, shewing the tongue, &c. &c. As a further specimen of the style in which these important matters are treated, we give the following—*for the ladies*:—

"In salutation, valediction, reconciliation, or renewing of love, congratulation, approbation, adulation, subjection, confederation, but more especially and naturally in token of love, we use to kiss, which is done by drawing together the lips into themselves, and a little putting forth the parts that lie loosely scattered about the mouth, this being the usual prologue to a kiss, which cannot be decently done unless we a little contract our mouth; which significations of our will are thus exhibited by the moving of the muscle commonly called the constringent pair of the lips, or *corrugans*, from puckering the mouth, which is done after this manner:—The upper lip is not only drawn together, but withal pulled downward, and the lower lip lifted up, whereby the lips are collected and reduced into themselves. This muscle I find, from its employment, to be called *osculatorium*, because it contracts the lips when we fasten a kiss upon another;

which name implies only the manner of the outward action, and not any inward affection of the mind exhibited thereby, the Latins having no word to signify both, which the Greeks have, with whom φιλεῖν is both to love and to kiss. This muscle, from its office, might be called the loving pair—*par dilectionis*, or the sphincter of salutation."

The Chirosopher discusses also whether or not men can shake their ears as a general rule. Pliny, of whom he takes no notice, decides in the negative."*

"Claramontius," says our author, "and, indeed, all semeiotical philosophers, are here lost, concluding that there is scarce any refluction of the affection into the ears, and that of themselves they have no order at all to motion;"

—which explains the cruel irony of the expression "Go shake your ears." The whole family of the Flacci at Rome, however, with Hercules and the Emperor Justinian, are said to have been not quite so helpless; and St. Augustin speaks of those who could move one or both ears at pleasure. Casaubon and Hofman had themselves seen individuals who could perform this achievement. Vesalius had met at Padua a facetious lawyer, one Claudius Symonius, a Forojuliensian, and a valiant and stout man called Petrus Ravisierius, of Geneva, who could with great facility wag their ears. Scipio Duplesis, moreover, surnamed "the Resolver," writes of two inhabitants of Gascony whom he had ascertained from personal observation to possess this faculty. Bulwer himself reports that a schoolfellow of his used in sport to move his ears; and we ourselves can add, that whilst undergoing the process of education we were fortunate enough once to encounter a boy who could not only shake his ears, but fold them like a leaf of the sensitive plant shrinking from the hand of man.

We cannot refrain, before concluding this paper, from giving a brief sketch of John Bulwer's speculations on laughter. He introduces them by a description of the broad membrane which covers the face like a vizard, and under which work the forty-six muscles that concur in producing the varied expressions of the countenance, twenty-four being destined to assist the motions of the eyes and eyebrows alone, which show the importance of these features in the physical language of the passions. "By means of these instruments, man," says Bulwer, "with his very countenance alone, can express all his mind and desire, when at any time it happens to be inconvenient or unlawful to open it in words at length."

"In profuse laughter," observes our author, "the motions that appear in the face are very remarkable, there being not any particle of the face that is movable but it is moved by common or its particular muscles, which lie under the skin of the face, and whose actions introduce so notable a change and alteration in the countenance. Man only laughs because he hath a countenance furnished with muscles to declare what is signified thereby. In other creatures the face, or muzzle rather, is dull and heavy, and seems to sleep in an immovable habit; not but that other creatures are stirred up after their manner to express some signs of exultation and delight, which supply the place of laughter: but because they do not, as we do, change their countenance, they are not said to laugh. * * * In this drama of the muscles performed by excessive laughter upon the theatre of mirth, the countenance, the mouth seems to lead the chorus."

After this Bulwer enters into a minute description of the confusion produced in the face by excessive laughter (passing from the lips to the nose, eyes, and eyebrows), and explains by the way why it causes the jaws to ache, and why some ladies refrain from laughing. He also advances what he maintains to be a new theory, namely, that the forehead is immovable in laughter. If, however, it be new, it is false. Some men's foreheads in laughter wrinkle excessively, a true representation of which may be seen in the Laughing Faun.

Into further details, however, we cannot enter, and shall conclude with a word on the new nomenclature proposed by the Chirosopher. As the reader will have already suspected, he derives the names he proposes to give to the muscles from the affections of the mind they assist in expressing. A few specimens will impart some idea of his plan. The two muscles which perform the act of nodding are called the assenting or yielding pair, or the muscles of approbation; those which assist in bowing are the reverential pair, or the muscles of adoration; those by which the shaking of the head is performed are called *musculos abnuentes*, denying muscles; that which turns the eye towards the nose is the squinting, tragic, or hobgoblin muscle; and so on.

From these xamples it will be seen that our friend Bulwer wishes to establish that all the muscles of the face are employed to express the passions of the mind, and that by observing their motions we may become

* Hist. Nat. lib. xi. c. 50.

acquainted with the character of the persons with whom we mix in the world. And there can be no doubt that the physiognomist is able, in a limited degree, to effect this. But whether it be possible to reduce the observation of "the pathetical motions of the countenance" into a *science* is another thing. We think it is not. The *art* of detecting the inner workings of the spirit by scrutinizing the features may be attained by a man of calm understanding and acute observation, but this power cannot be communicated in any thing like perfection to another. There is no progressive improvement in physiognomy. All depends on the individual ability of one man. At the same time the study is by no means unuseful. If it be difficult or impossible to attain the power of "finding the mind's construction in the face," it is yet within the reach of all to acquire some knowledge of the workings of the passions as connected with their outward manifestations. By studying physiognomy also, the speculator on moral phenomena will greatly assist himself, for the mind loves to find something material whereon to rest. It soon grows weary of the circling flight of the eagle, and alights with pleasure on a pinnacle whose base reposes on the earth. Those, therefore, who can reconcile themselves to Bulwer's quaint style, frigid allegories, ridiculous conceits, and absurd nomenclature, will not go away uninstructed from his pages. Let them, therefore, look out for his volume. It is rare, and we wish they may get it. The man had much sterling sense, a good knowledge of the scholastic philosophy, a considerable—nay, a profound acquaintance with anatomy, and though not always successful in his explanations, or philosophical in his theories, he is almost always ingenious, and invariably contrives to enliven his disquisitions by some odd expression or eccentric idea.

CONFESSIONS AND OBSERVATIONS OF A WATER-PATIENT.

BY S. E. BULWER LYTTON, BART.

From the New Monthly Magazine.

DEAR MR. EDITOR:

I am truly glad to see so worthily filled the presidency in one of the many chairs which our republic permits to criticism and letters—a dignity in which I had the honor to precede you, *sub consule Planco*, in the good days of William IV. I feel as if there were something ghostlike in my momentary return to my ancient haunts, no longer in the editorial robe and purple, but addressing a new chief, and in great part, a new assembly: For the reading public is a creature of rapid growth—every five years a fresh generation pours forth from our institutes, our colleges, our schools, demanding, and filled with fresh ideas, fresh principles and hopes. And the seas wash the place where Canute parleyed with the waves. All that interested the world, when to me (then Mr. Editor), now your humble servant, contributors addressed their articles—hot and seasoned for the month, and like all good articles to a periodical "warranted *not* to keep," have passed away into the lumber-room, where those old maids, History and Criticism, hoard their scraps and relics, and where, amidst dust and silence, things old-fashioned ripen into things antique. The roar of the Reform Bill is still, Fanny Kemble acts no more, the "Hunchback" awaits upon our shelves the resuscitation of a new *Julia;* poets of promise have become mute, Rubini sings no more, Macready is in the provinces; "Punch" frisks it on the jocund throne of Sydney Smith, and over a domain once parcelled amongst many, reigns "Boz." Scattered and voiceless the old contributors—a new hum betrays the changing Babel of a new multitude. Gliding thus, I say, ghostlike, amidst the present race, busy and sanguine as the past, I feel that it best suits with a ghost's dignity, to appear but for an admonitory purpose; not with the light and careless step of an ordinary visitor, but with meaning stride, and finger upon lip. Ghosts, we know, have appeared to predict death—more gentle I, my apparition would only promise healing, and beckon not to graves and charnels, but to the Hygeian spring.

And now that I am fairly on the ground, let us call to mind, Mr. Editor, the illustrious names which still overshadow it at once with melancholy and fame. Your post has been filled by men, whose fate precludes the envy which their genius might excite. By Campbell, the high-souled and silver-tongued, and by Hook, from whom jest, and whim, and humor, flowed in so free and riotous a wave, that books confined and narrowed away the stream; to read Hook is to wrong him. Nor can we think of your predecessors without remembering your rival, Hood, who, as the tree puts forth the

most exuberant blossoms the year before its decay, showed the bloom and promise of his genius most when the worm was at the trunk. To us behind the scenes, to us who knew the men, how melancholy the contrast between the fresh and youthful intellect, the worn out and broken frame; for, despite what I have seen written, Campbell when taken at the right moment, was Campbell ever. Not capable indeed, towards the last, of the same exertion, if manifested by those poor evidences of what is in us, that books parade, but still as powerful in his great and noble thoughts, in the oral poetry revealed by flashes and winged words, though unrounded into form. And Hook jested on the bed of death, as none but he could jest. And Hood! who remembers not the tender pathos, the exquisite humanity which spoke forth from his darkened room? Alas! what prolonged pangs, what heavy lassitude, what death in life did these men endure!

Here we are, Mr. Editor, in these days of cant and jargon, preaching up the education of the mind, forcing our children under melon-frames, and babbling to the laborer and mechanic, "Read, and read, and read," as if God had not given us muscles, and nerves, and bodies, subjected to exquisite pains as pleasures—as if the body were not to be cared for and cultivated as well as the mind; as if health were no blessing instead of that capital good, without which all other blessings—save the hope of health eternal—grow flat and joyless; as if the enjoyment of the world in which we are, was not far more closely linked with our physical than our mental selves; as if we were better than maimed and imperfect men; so long as our nerves are jaded and prostrate, our senses dim and heavy, our relationship with Nature abridged and thwarted by the jaundiced eye, and failing limb, and trembling hand—the apothecary's shop between us and the sun! For the mind, we admit, that to render it strong and clear, habit and discipline are required; —how deal we (especially we, Mr. Editor, of the London world—we of the literary craft —we of the restless, striving brotherhood) —how deal we with the body? We carry it on with us, as a post-horse, from stage to stage—does it flag? no rest! give it ale or the spur. We begin to feel the frame break under us;—we administer a drug, gain a temporary relief, shift the disorder from one part to another—forget our ailments in our excitements, and when we pause at last, thoroughly shattered, with complaints grown chronic, diseases fastening to the organs, send for the doctors in good earnest, and die as your predecessors and your rival died, under combinations of long-neglected maladies, which could never have been known had we done for the body what we do for the mind—made it strong by discipline, and maintained it firm by habit. Not alone calling to recollection our departed friends, but looking over the vast field of suffering which those acquainted with the lives of men who think and labor cannot fail to behold around them, I confess, though I have something of Canning's disdain of professed philanthropists, and do not love every knife-grinder as much as if he were my brother—I confess nevertheless that I am filled with an earnest pity; and an anxious desire seizes me to communicate to others that simple process of healing and well being which has passed under my own experience, and to which I gratefully owe days no longer weary of the sun, and nights which no longer yearn for and yet dread the morrow.

And now, Mr. Editor, I may be pardoned, I trust, if I illustrate by my own case the system, I commend to others.

I have been a workman in my day. I began to write and to toil, and to win some kind of a name, which I had the ambition to improve, while yet little more than a boy. With strong love for study in books—with yet greater desire to accomplish myself in the knowledge of men, for sixteen years I can conceive no life to have been more filled by occupation than mine. What time was not given to the action was given to study; what time not given to study, to action—labor in both! To a constitution naturally far from strong, I allowed no pause or respite. The wear and tear went on without intermission—the whirl of the wheel never ceased. Sometimes, indeed, thoroughly overpowered and exhausted, I sought for escape. The physicians said "Travel," and I travelled. "Go into the country," and I went. But in such attempts at repose all my ailments gathered round me—made themselves far more palpable and felt. I had no resource but to fly from myself—to fly into the other world of books, or thought, or reverie—to live in some state of being less painful than my own. As long as I was always at work it seemed that I had no leisure to be ill. Quiet was my torment.

At length the frame thus long neglected —patched up for a while by drugs and doctors—put off and trifled with as an intrusive dun—like a dun who is in his rights

—brought in its arrears—crushing and terrible, accumulated through long years. Worn out and wasted, the constitution seemed wholly inadequate to meet the demand. The exhaustion of toil and study had been completed by great anxiety and grief. I had watched with alternate hope and fear the lingering and mournful deathbed of my nearest relation and dearest friend —of the person around whom was entwined the strongest affection my life had known —and when all was over, I seemed scarcely to live myself.

At this time, about the January of 1844, I was thoroughly shattered. The least attempt at exercise exhausted me. The nerves gave way at the most ordinary excitement—a chronic irritation of that vast surface we call the mucous membrane which had defied for years all medical skill, rendered me continually liable to acute attacks, which from their repetition, and the increased feebleness of my frame, might at any time be fatal. Though free from any organic disease of the heart, its action was morbidly restless and painful. My sleep was without refreshment. At morning I rose more weary than I laid down to rest.

Without fatiguing you and your readers further with the *longa cohors* of my complaints, I pass on to record my struggle to resist them. I have always had a great belief in the power of WILL. What a man determines to do—that in ninety-nine cases out of the hundred I hold that he succeeds in doing. I determined to have some insight into a knowledge I had never attained since manhood—the knowledge of health.

I resolutely put away books and study, sought the airs which the physicians esteemed most healthful, and adopted the strict regimen on which all the children of Æsculapius so wisely insist. In short, I maintained the same general habits as to hours, diet (with the exception of wine, which in moderate quantities seemed to me indispensable,) and, so far as my strength would allow, of exercise, as I found afterwards instituted at hydropathic establishments. I dwell on this to forestall in some manner the common remark of persons not well acquainted with the medical agencies of water—that it is to the regular life which water-patients lead, and not to the element itself that they owe their recovery. Nevertheless I found that these changes, however salutary in theory, produced little if any practical amelioration in my health. All invalids know, perhaps, how difficult, under ordinary circumstances, is the alteration of habits from bad to good. The early rising, the walk before breakfast, so delicious in the feelings of freshness and vigor which they bestow upon the strong, often become punishments to the valetudinarian. Headache, languor, a sense of weariness over the eyes, a sinking of the whole system towards noon, which seemed imperiously to demand the dangerous aid of stimulants, were all that I obtained by the morning breeze and the languid stroll by the sea shore. The suspension from study only afflicted me with intolerable *ennui*, and added to the profound dejection of the spirits. The brain, so long accustomed to morbid activity, was but withdrawn from its usual occupations to invent horrors and chimeras. Over the pillow, vainly sought two hours before midnight, hovered no golden sleep. The absence of excitement, however unhealthy, only aggravated the symptoms of ill health.

It was at this time that I met by chance, in the library at St. Leonard's, with Captain Claridge's work on the "Water Cure," as practised by Preisnitz, at Graafenberg. Making allowance for certain exaggerations therein, which appeared evident to my common sense, enough still remained not only to captivate the imagination and flatter the hopes of an invalid, but to appeal with favor to his sober judgment. Till then, perfectly ignorant of the subject and the system, except by some such vague stories and good jests as had reached my ears in Germany, I resolved at least to read what more could be said in favor of the *ariston udor*, and examine dispassionately into its merits as a medicament. I was then under the advice of one of the first physicians of our age. I had consulted half the faculty. I had every reason to be grateful for the attention, and to be confident in the skill, of those whose prescriptions had, from time to time, flattered my hopes and enriched the chemist. But the truth must be spoken—far from being better, I was sinking fast. Little remained to me to try in the great volume of the herbal. Seek what I would next, even if a quackery, it certainly might expedite my grave, but it could scarcely render life—at least the external life—more unjoyous. Accordingly I examined, with such grave thought as a sick man brings to bear upon his case, all the grounds upon which to justify to myself—an excursion to the snows of Silesia. But I own that in proportion as I found my faith in the system strengthen, I shrunk from the terrors of this long jour-

ney to the rugged region in which the probable lodging would be a laborer's cottage,* and in which the Babel of a hundred languages (so agreeable to the healthful delight in novelty—so appalling to the sickly despondency of a hypochondriac,) would murmur and growl over a public table spread with no tempting condiments. Could I hope to find healing in my own land, and not too far from my own doctors in case of failure, I might indeed solicit the watery gods—but the journey! I who scarcely lived through a day without leech or potion! —the long—gelid journey to Graafenberg —I should be sure to fall ill by the way—to be clutched and mismanaged by some German doctor—to deposite my bones in some dismal church-yard on the banks of the Father Rhine.

While thus perplexed, I fell in with one of the pamphlets written by Doctor Wilson, of Malvern, and my doubts were solved. Here was an English doctor, who had himself known more than my own sufferings, who, like myself, had found the pharmacopeia in vain—who had spent ten months at Graafenberg, and left all his complaints behind him—who, fraught with the experience he had acquired, not only in his own person, but from scientific examination of the cases under his eye, had transported the system to our native shores, and who proffered the proverbial salubrity of Malvern air and its holy springs, to those who, like me, had ranged in vain, from simple to mineral, and who had become bold by despair—bold enough to try if health, like truth, lay at the bottom of a well.

I was not then aware that other institutions had been established in England of more or less fame. I saw in Doctor Wilson the first transporter—at least as a physician—of the Silesian system, and did not pause to look out for other and later pupils of this innovating German school.

I resolved then to betake myself to Malvern. On my way through town I paused, in the innocence of my heart, to inquire of some of the faculty if they thought the water-cure would suit my case. With one exception, they were unanimous in the vehemence of their denunciations. Granting even that in some cases, especially of rheumatism, hydropathy had produced a cure—to my complaints it was worse than inapplicable—it was highly dangerous—it would probably be fatal. I had not stamina for the treatment—it would fix chronic ailments into organic disease—surely it would be much better to try what I had not yet tried. What had I not yet tried? A course of prussic acid! Nothing was better for gastrite irritation, which was no doubt the main cause of my suffering! If, however, I were obstinately bent upon so mad an experiment, Doctor Wilson was the last person I should go to. I was not deterred by all these intimidations, nor seduced by the salubrious allurements of the prussic acid under its scientific appellation of hydiocamic. A little reflection taught me that the members of a learned profession are naturally the very persons least disposed to favor innovation upon the practices which custom and prescription have rendered sacred in their eyes. A lawyer is not the person to consult upon bold reforms in jurisprudence. A physician can scarcely be expected to own that a Silesian peasant will cure with water the diseases which resist an armament of phials. And with regard to the peculiar objections to Dr. Wilson, I had read in his own pamphlet attacks upon the orthodox practice sufficient to account for—perhaps to justify—the disposition to depreciate him in return.

Still my friends were anxious and fearful; to please them I continued to inquire, though not of physicians but of patients. I sought out some of those who had gone through the process. I sifted some of the cases of cure cited by Doctor Wilson. I found the account of the patients so encouraging, the cases quoted so authentic, that I grew impatient of delay. I threw physic to the dogs, and went to Malvern.

It is not my intention, Mr. Editor, to detail the course I underwent. The different resources of water as a medicament, are to be found in many works easily to be obtained, and well worth the study. In this letter I suppose myself to be addressing those as thoroughly unacquainted with the system as I myself was at the first, and I deal therefore only in generals.

The first point which impressed and struck me was the extreme and utter innocence of the water-cure in skilful hands—in any hands indeed not thoroughly new to the system. Certainly when I went, I be-

* Let me not disparage the fountain head of the water-cure, the parent institution of the great Preisnitz. I believe many of the earlier hardships complained of at Graafenberg have been removed or amended; and such as remain, are no doubt well compensated by the vast experience and extraordinary tact of a man who will rank hereafter amongst the most illustrious discoverers who have ever benefited the human race.

lieved it to be a kill or cure system. I fancied it must be a very violent remedy—that it doubtless might effect great and magical cures—but that if it failed it might be fatal. Now, I speak not alone of my own case, but of the immense number of cases I have seen—patients of all ages—all species and genera of disease—all kinds and conditions of constitution, when I declare, upon my honor, that I never witnessed one dangerous symptom produced by the water-cure, whether at Doctor Wilson's or the other Hydropathic Institutions which I afterwards visited. And though unquestionably fatal consequences might occur from gross mismanagement, and as unquestionably have so occurred at various establishments, I am yet convinced that water in itself is so friendly to the human body, that it requires a very extraordinary degree of bungling, of ignorance, and presumption, to produce results really dangerous; that a regular practitioner does more frequent mischief from the misapplication of even the simplest drugs, than a water doctor of very moderate experience does, or can do, by the misapplication of his baths and friction. And here I must observe, that those portions of the treatment which appear to the uninitiated as the most perilous, are really the safest,* and can be applied with the most impunity to the weakest constitutions; whereas those which appear from our greater familiarity with them, the least startling and most innocuous,† are those which require the greatest knowledge of general pathology and the individual constitution. I shall revert to this part of my subject before I conclude.

The next thing that struck me was the extraordinary ease with which, under this system, good habits are acquired and bad habits relinquished. The difficulty with which, under orthodox medical treatment, stimulants are abandoned, is here not witnessed. Patients accustomed for half a century to live hard and high, wine drinkers, spirit-bibbers, whom the regular physician has sought in vain to reduce to a daily pint of sherry, here voluntarily resign all strong potations, after a day or two cease to feel the want of them, and reconcile themselves to water as if they had drank nothing else all their lives. Others, who have had recourse for years and years to medicine,—their potion in the morning, their cordial at noon, their pill before dinner, their narcotic at bed-time, cease to require these aids to life, as if by a charm. Nor this alone. Men to whom mental labor has been a necessary—who have existed on the excitement of the passions and the stir of the intellect—who have felt, these withdrawn, the prostration of the whole system—the lock to the wheel of the entire machine—return at once to the careless spirits of the boy in his first holiday

Here lies a great secret; water thus skilfully administered is in itself a wonderful excitement, it supplies the place of all others—it operates powerfully and rapidly upon the nerves, sometimes to calm them, sometimes to irritate, but always to occupy.—Hence follows a consequence which all patients have remarked—the complete repose of the passions during the early stages of the cure; they seem laid asleep as if by enchantment. The intellect shares the same rest; after a short time, mental exertion becomes impossible; even the memory grows far less tenacious of its painful impressions, cares and griefs are forgotten; the sense of the present absorbs the past and future; there is a certain freshness and youth which pervade the spirits, and live upon the enjoyment of the actual hour. Thus the great agents of our mortal wear and tear—the passions and the mind—calmed into strange rest,—Nature seems to leave the body to its instinctive tendency, which is always towards recovery. All that interests and amuses is of a healthful character; exercise, instead of being an unwilling drudgery, becomes the inevitable impulse of the frame braced and invigorated by the element. A series of reactions is always going on—the willing exercise produces refreshing rest, the refreshing rest willing exercise. The extraordinary effect which water taken early in the morning produces on the appetite is well known amongst those who have tried it, even before the water-cure was thought of; an appetite it should be the care of the skilful doctor to check into moderate gratification; the powers of nutrition become singularly strengthened, the blood grows rich and pure—the constitution is not only amended—it undergoes a change.*

The safety of the system, then, struck me first;—its power of replacing by healthful stimulants the morbid ones it withdrew,

* Such as the wet-sheet packing.

† The plunge-bath—the Douche.

* Doctor Wilson observed to me once, very truly I think, that many regular physicians are beginning to own the effect of water as a stimulant, who yet do not perceive its far more complicated and beneficial effects as an alterative.

whether physical or moral, surprised me next;—that which thirdly impressed me was no less contrary to all my preconceived notions. I had fancied that whether good or bad, the system must be one of great hardship, extremely repugnant and disagreeable. I wondered at myself to find how soon it became so associated with pleasurable and grateful feelings as to dwell upon the mind amongst the happiest passages of existence. For my own part, despite all my ailments, or whatever may have been my cares, I have ever found exquisite pleasure in that sense of *being* which is as it were the conscience, the mirror of the soul. I have known hours of as much and as vivid happiness as perhaps can fall to the lot of man; but amongst all my most brilliant recollections I can recall no periods of enjoyment at once more hilarious and serene than the hours spent on the lonely hills of Malvern—none in which nature was so thoroughly possessed and appreciated. The rise from a sleep sound as childhood's—the impatient rush into the open air, while the sun was fresh, and the birds first sang—the sense of an unwonted strength in every limb and nerve, which made so light of the steep ascent to the holy spring—the delicious sparkle of that morning draught—the green terrace on the brow of the mountain, with the rich landscape wide and far below—the breeze that once would have been so keen and biting, now but exhilarating the blood, and lifting the spirits into religious joy; and this keen sentiment of present pleasure rounded by a hope sanctioned by all I felt in myself, and nearly all that I witnessed in others—that that very present was but the step—the threshold—into an unknown and delightful region of health and vigor; —a disease and a care dropping from the frame and the heart at every stride.

But here I must pause to own that if on the one hand the danger and discomforts of the cure are greatly exaggerated (exaggerated is too weak a word)—so on the other hand, as far as my own experience, which is perhaps not inconsiderable, extends, the enthusiastic advocates of the system have greatly misrepresented the duration of the curative process. I have read and heard of chronic diseases of long standing cured permanently in a very few weeks. I candidly confess that I have seen none such. I have, it is true, witnessed many chronic diseases perfectly cured—diseases which had been pronounced incurable by the first physicians, but the cure has been long and fluctuating. Persons so afflicted who try this system must arm themselves with patience. The first effects of the system are indeed usually bracing, and inspire such feelings of general well-being, that some think they have only to return home, and carry out the cure partially to recover. A great mistake—the alterative effects begin long after the bracing—a disturbance in the constitution takes place, prolonged more or less, and not till that ceases does the cure really begin. Not that the peculiar "crisis," sought for so vehemently by the German water-doctors, and usually under their hands manifested by boils and eruptions, is at all a necessary part of the cure—it is, indeed, as far as I have seen, of rare occurrence—but a critical action, not single, not confined to one period, or one series of phenomena, is at work, often undetected by the patient himself, during a considerable (and that the later) portion of the cure in most patients where the malady has been grave, and where the recovery becomes permanent. During this time the patient should be under the eye of his water-doctor.

To conclude my own case: I staid some nine or ten weeks at Malvern, and business, from which I could not escape, obliging me then to be in the neighborhood of town, I continued the system seven weeks longer under Doctor Weiss, at Petersham; during this latter period the agreeable phenomena which had characterized the former, the cheerfulness, the *bien aise*, the consciousness of returning health, vanished; and were succeeded by great irritation of the nerves, extreme fretfulness, and the usual characteristics of the constitutional disturbance to which I have referred. I had every reason, however, to be satisfied with the care and skill of Doctor Weiss, who fully deserves the reputation he has acquired, and the attachment entertained for him by his patients; nor did my judgment ever despond or doubt of the ultimate benefits of the process. I emerged at last from these operations in no very portly condition. I was blanched and emaciated—washed out like a thrifty housewife's gown—but neither the bleaching nor the loss of weight had in the least impaired my strength; on the contrary, all the muscles had grown as hard as iron, and I was become capable of great exercise without fatigue; my cure was not effected, but I was compelled to go into Germany. On my return homewards I was seized with a severe cold, which rapidly passed into high fever. Fortunately I was within reach of

Doctor Schmidt's magnificent hydropathic establishment at Boppart; thither I caused myself to be conveyed; and now I had occasion to experience the wonderful effect of the water-cure in acute cases; slow in chronic disease, its beneficial operation in acute is immediate. In twenty-four hours all fever had subsided, and on the third day I resumed my journey, relieved from every symptom that had before prognosticated a tedious and perhaps alarming illness.

And now came gradually, yet perceptibly, the good effects of the system I had undergone; flesh and weight returned; the sense of health became conscious and steady; I had every reason to bless the hour when I first sought the springs of Malvern. And here, I must observe, that it often happens that the patient makes but slight apparent improvement, when under the cure, compared with that which occurs subsequently. A water-doctor of repute at Brussels, indeed, said frankly to a grumbling patient, "I do not expect you to be well while here—it is only on leaving me that you will know if I have cured you."

It is as the frame recovers from the agitation it undergoes, that it gathers round it power utterly unknown to it before—as the plant watered by the rains of one season, betrays in the next the effect of the grateful dews.

I had always suffered so severely in winter, that the severity of our last one gave me apprehensions, and I resolved to seek shelter from my fears at my beloved Malvern. I here passed the most inclement period of the winter, not only perfectly free from the colds, rheums, and catarrhs, which had hitherto visited me with the snows, but in the enjoyment of excellent health: and I am persuaded that for those who are delicate, and who suffer much during the winter, there is no place where the cold is so little felt as at a water-cure establishment. I am persuaded also, and in this I am borne out by the experience of most water doctors, that the cure is most rapid and effectual during the cold season—from autumn through the winter. I am thoroughly convinced that consumption in its earlier stages can be more easily cured, and the predisposition more permanently eradicated, by a winter spent at Malvern, under the care of Doctor Wilson, than by the timorous flight to Pisa or Madeira. It is by hardening rather than defending the tissues that we best secure them from disease.

And now, to sum up, and to dismiss my egotistical revelations, I desire in no way to overcolor my own case; I do not say that when I first went to the water-cure I was affected with any disease immediately menacing to life—I say only that I was in that prolonged and chronic state of ill health, which made life at the best extremely precarious—I do not say that I had any malady which the faculty could pronounce incurable—I say only that the most eminent men of the faculty had failed to cure me. I do not even now affect to boast of a perfect and complete deliverance from all my ailments—I cannot declare that a constitution naturally delicate has been rendered Herculeanl, or that the wear and tear of a whole manhood have been thoroughly repaired. What might have been the case had I not taken the cure at intervals, had I remained at it steadily for six or eight months without interruption, I cannot do more than conjecture; but so strong is my belief that the result would have been completely successful, that I promise myself, whenever I can spare the leisure, a long renewal of the system. These admissions made, what have I gained meanwhile to justify my eulogies and my gratitude?—an immense accumulation of the *capital of health*. Formerly it was my favorite and querulous question to those who saw much of me, "Did you ever know me twelve hours without pain or illness?" Now, instead of these being my constant companions, they are but my occasional visitors. I compare my old state and my present to the poverty of a man who has a shilling in his pocket, and whose poverty is therefore a struggle for life, with the occasional distresses of a man of 5000*l*. a year, who sees but an appendage endangered, or a luxury abridged. All the good that I have gained, is wholly unlike what I have ever derived either from medicine or the German mineral baths: in the first place, it does not relieve a single malady alone, it pervades the whole frame; in the second place, far from subsiding, it seems to increase by time, so that I may reasonably hope that the latter part of my life, instead of being more infirm than the former, will become—so far as freedom from suffering, and the calm enjoyment of external life are concerned—my real, my younger youth. And it is this profound conviction which has induced me to volunteer these details, in the hope (I trust a pure and kindly one), to induce those who more or less have suf-

fered as I have done, to fly to the same rich and bountiful resources. We ransack the ends of the earth for drugs and minerals—we extract our potions from the deadliest poisons—but around us and about us, Nature, the great mother, proffers the Hygean fount, unsealed, and accessible to all. Wherever the stream glides pure, wherever the spring sparkles fresh, there, for the vast proportion of the maladies which Art produces, Nature yields the benignant healing.

It remains for me to say, merely as an observer, and solely with such authority as an observer altogether disinterested, but without the least pretence to professional science, may fairly claim, what class of diseases I have seen least and most tractable to the operations of the water-cure, and how far enthusiasts appear to me to have over-estimated, how far skeptics have undervalued, the effects of water as a medicament. There are those (most of the water doctors especially) who contend that all medicine by drugs is unnecessary—that water internally and outwardly applied suffices in skilful management for all complaints—that the time will come when the drug doctor will cease to receive a fee, when the apothecary will close his shop, and the water cure be adopted in every hospital and by every family. Dreams and absurdities! Even granting that the water cure were capable of all the wonders ascribed to it, its process is so slow in most chronic cases—it requires such complete abstraction from care and business—it takes the active man so thoroughly out of his course of life, that a vast proportion of those engaged in worldly pursuits cannot hope to find the requisite leisure. There are also a large number of complaints (perhaps the majority) which yield so easily to a sparing use of drugs under a moderately competent practitioner, that the convenient plan of sending to the next chemist for your pill or potion can never be superseded, nor is it perhaps desirable that it should be. Moreover, as far as I have seen, there are complaints curable by medicine which the water cure utterly fails to reach.

The disorders wherein hydropathy appears to me to be least effectual are, first neuralgic pains, especially the monster pain of the Tic Doloreux. Not one instance of a cure in the latter by hydropathy has come under my own observation, and I have only heard of one authentic case of recovery from it by that process. Secondly, paralysis of a grave character in persons of an advanced age. Thirdly, in tubercular consumption. As may be expected in this stage of that melancholy disease, the water cure utterly fails to restore, but I have known it even here prolong life, beyond all reasonable calculation, and astonishingly relieve the more oppressive symptoms. In all cases where the nervous exhaustion is great and of long standing, and is accompanied with obstinate hypochondria, hydropathy, if successful at all, is very slow in its benefits, and the patience of the sufferer is too often worn out before the favorable turn takes place. I have also noticed that obstinate and deep-rooted maladies in persons otherwise of very athletic frames, seem to yield much more tardily to the water cure than similar complaints in more delicate constitutions; so that you will often see of two persons afflicted by the same genera of complaints, the feeble and fragile one recover before the stout man with Atlantic shoulders evinces one symptom of amelioration.

Those cases, on the other hand, in which the water cure seems an absolute panacea, and in which the patient may commence with the most sanguine hopes, are, First, rheumatism, however prolonged, however complicated. In this the cure is usually rapid—nearly always permanent. Secondly, gout. Here its efficacy is little less startling to appearance than in the former case; it seems to take up the disease by the roots; it extracts the peculiar acid, which often appears in discolorations upon the sheets used in the application, or is ejected in other modes. But here, judging always from cases subjected to my personal knowledge, I have not seen instances to justify the assertion of some water doctors, that returns of the disease do not occur. The predisposition—the tendency, has appeared to me to remain. The patient is liable to relapses—but I have invariably found them *far* less frequent, less lengthened; and readily susceptible of simple and speedy cure, especially if the habits remain temperate.

Thirdly, that wide and grisly family of affliction classed under the common name of *dyspepsia*. All derangements of the digestive organs, imperfect powers of nutrition—the *malaise* of an injured stomach, appear precisely the complaints on which the system takes firmest hold, and in which it effects those cures that convert existence from a burden into a blessing. Hence it

follows that many nameless and countless complaints proceeding from derangement of the stomach, cease as that great machine is restored to order. I have seen disorders of the heart which have been pronounced organic by the learned authorities of the the profession, disappear in an incredibly short time—cases of incipient consumption, in which the seat is in the nutritious powers, hœmorrhages, and various congestions, shortness of breath, habitual fainting fits, many of what are called, improperly, nervous complaints, but which, in reality, are indications from the main ganglionic spring; the disorders produced by the abuse of powerful medicines, *especially mercury* and iodine, the loss of appetite, the dulled sense, and the shaking hand of intemperance, skin complaints, and the dire scourge of scrofula—all these seem to obtain from hydropathy relief—nay, absolute and unqualified cure, beyond not only the means of the most skilful drug doctor, but the hopes of the most sanguine patient.*

The cure may be divided into two branches—the process for acute complaints —that for chronic; I have just referred to the last. And great as are there its benefits, they seem commonplace beside the effect the system produces in acute complaints. Fever, including the scarlet and the typhus, influenza, measles, small-pox, the sudden and rapid disorders of children, are cured with a simplicity and precision which must, I am persuaded, sooner or later, render the resources of the hydropathist the ordinary treatment for such acute complaints in the hospitals. The principal remedy here employed by the water doctor is, the wet-sheet packing, which excites such terror amongst the uninitiated, and which, of all the curatives adopted by hydropathy, is unquestionably the safest—the one that can be applied without danger to the greatest variety of cases, and which I do not hesitate to aver, can rarely, if ever, be misapplied in any cases where the pulse is hard and high, and the skin dry and burning. I have found in conversation so much misapprehension of this very easy and very luxurious remedy, that I may be pardoned for re-explaining what has been explained so often. It is not, as people persist in supposing, that patients are put into wet sheets and there left to shiver. The sheets, after being saturated, are well wrung out—the patient quickly wrapped in them—several blankets tightly bandaged round, and a feather-bed placed at top; thus, especially where there is the least fever, the first momentary chill is promptly succeeded by a gradual and vivifying warmth, perfectly free from the irritation of *dry* heat—a delicious sense of ease is usually followed by a sleep more agreeable than anodynes ever produced. It seems a positive cruelty to be relieved from this magic girdle in which pain is lulled, and fever cooled, and watchfulness lapped in slumber. The bath which succeeds, refreshes and braces the skin, which the operation relaxed and softened; they only who have tried this, after fatigue or in fever, can form the least notion of its pleasurable sensations, and of its extraordinary efficacy; nor is there any thing startling or novel in its theory. In hospitals now water-dressings are found the best poultice to an inflamed member; this expansion of the wet dressing is a poultice to the whole inflamed surface of the body. It does not differ greatly, except in its cleanliness and simplicity, from the old remedy of the ancients—the wrapping the body in the skins of animals newly slain, or placing it on dunghills, or immersing it, as now in Germany, in the soft slough of mud-baths.* Its theory is that of warmth and moisture, those friendliest agents to inflammatory disorders. In fact, I think it the duty of every man, on whom the lives of others depend, to make himself acquainted with at least this part of the water-cure:—the wet sheet is the true life preserver. In the large majority of sudden inflammatory complaints, the doctor at a distance, prompt measures indispensable, it will at the least arrest the disease, check the fever, till, if you prefer the drugs, the drugs can come—the remedy is at hand, wherever you can find a bed and a jug of water; and whatever else you may apprehend after a short visit to a hydropathic establishment, your fear of that bugbear—the wet sheet—is the first you banish. The

* Amongst other complaints, I may add dropsy, which in its simple state, and not as the crowning symptom of a worn out constitution, I have known most successfully treated; cases of slight paralysis; and I have witnessed two instances of partial blindness, in which the sight was restored.

* A very eminent London physician, opposed generally to the water-cure, told me that he had effected a perfect cure in a case of inveterate leprosy, by swathing the patient in wet lint covered with oil skin. This *is* the wet sheet packing, but there are patients who would take kindly to wet lint, and shudder at the idea of a wet sheet!

only cases, I believe, where it can be positively mischievous is where the pulse scarcely beats—where the vital sense is extremely low—where the inanition of the frame forbids the necessary reaction in cholera, and certain disorders of the chest and bronchia; otherwise at all ages, from the infant to the octogenarian, it is equally applicable, and in most acute cases, equally innocent.

Hydropathy being thus rapidly beneficial in acute disorders, it follows naturally that it will be quick as a cure in chronic complaints, in proportion as acute symptoms are mixed with them, and slowest when such complaints are dull and lethargic—it will be slowest also where the nervous exhaustion is the greatest. With children, its effects, really and genuinely, can scarcely be exaggerated; in them, the nervous system, not weakened by toil, grief, anxiety, and intemperance, lends itself to the gracious element as a young plant to the rains. When I see now some tender mother coddling, and physicking, and preserving from every breath of air, and swaddling in flannels, her pallid little ones, I long to pounce upon the callow brood, and bear them to the hills of Malvern, and the diamond fountain of St. Anne's—with what rosy faces and robust limbs I will promise they shall return—alas! I promise and preach in vain—the family apothecary is against me, and the progeny are doomed to rhubarb and the rickets.

The water-cure as yet has had this evident injustice,—the patients resorting to it have mostly been desperate cases. So strong a notion prevails that it is a desperate remedy, that they only who have found all else fail have dragged themselves to the Bethesda Pools. That all thus not only abandoned by hope and the College, but weakened and poisoned by the violent medicines absorbed into their system for a score or so of years,—that all should not recover is not surprising! The wonder is that the number of recoveries should be so great; that every now and then we should be surprised by the man whose untimely grave we predicted when we last saw him, meeting us in the street ruddy and stalwart, fresh from the springs of Graafenberg, Boppart, Petersham, or Malvern.

The remedy is *not* desperate; it is simpler, I do not say than any *dose*, but than any *course* of medicine—it is infinitely more agreeable—it admits no remedies for the complaint which are inimical to the constitution. It bequeathes none of the maladies consequent on blue pill and mercury—on purgatives and drastics—on iodine and aconite—on leeches and the lancet. If it cures your complaint, it will assuredly strengthen your whole frame; if it fails to cure your complaint it can scarcely fail to improve your general system. As it acts, or ought, scientifically treated, to act, first on the system, lastly on the complaint, placing nature herself in the way to throw off the disease, so it constantly happens that the patients at a hydropathic establishment will tell you that the disorder for which they came is not removed, but that in all other respects their health is better than they ever remember it to have been. Thus, I would not only recommend it to those who are sufferers from some grave disease; but to those who require merely the fillip, the alterative, or the bracing which they now often seek in vain in country air or a watering-place. For such, three weeks at Malvern will do more than three months at Brighton or Boulogne; for at the water-cure the whole life is one remedy; the hours, the habits, the discipline—not incompatible with gaiety and cheerfulness, (the spirits of hydropathists are astounding, and in high spirits all things are amusement,) tend per force to train the body to the highest state of health of which it is capable. Compare this life, O merchant, O trader, O man of business, escaping to the sea-shore, with that which you there led—with your shrimps and your shell-fish, and your wine and your brown stout—with all which counteracts in the evening, the good of your morning dip and your noonday stroll. What, I own, I should envy most is the robust, healthy man, only a little knocked down by his city cares or his town pleasures, after his second week at Dr. Wilson's establishment—yea, how I should envy the exquisite pleasure which he would derive from that robustness made clear and sensible to him. The pure taste, the iron muscles, the exuberant spirits, the overflowing sense of life. If even to the weak and languid the water-cure gives hours of physical happiness which the pleasures of the grosser senses can never bestow, what would it give to the strong man, from whose eye it has but to lift the light film—in whose mechanism, attuned to joy, it but brushes away the grain of dust, or oils the solid wheel.

I must bring my letter to a close. I

meant to address it through you, Mr. Editor, chiefly to our brethren—the overjaded sons of toil and letters—behind whom I see the warning shades of departed martyrs. But it is applicable to all who ail—to all who would not only cure a complaint, but strengthen a system and prolong a life. To such, who will so far attach value to my authority, that they will acknowledge, at least, I am no interested witness—for I have no institution to establish—no profession to build up—I have no eye to fees, my calling is but that of an observer—as an observer only do I speak, it may be with enthusiasm—but enthusiasm built on experience and prompted by sympathy; to such then as may listen to me, I give this recommendation: pause if you please—inquire if you will—but do not consult your doctor. I have no doubt he is a most honest, excellent man—but you cannot expect a doctor of drugs to say other than that doctors of water are but quacks. Do not consult your doctor whether you shall try hydropathy, but find out some intelligent persons in whose shrewdness you can confide—who have been patients themselves at a hydropathic establishment. Better still, go for a few days—the cost is not much—into some such institution yourself, look round, talk to the patients, examine with your own eyes, hear with your own ears, before you adventure the experiment. Become a witness before you are a patient; if the evidence does not satisfy you, turn and flee. But if you venture, venture with a good heart and a stout faith. Hope, but not with presumption. Do not fancy that the disorder which has afflicted you for ten years ought to be cured in ten days. Beware, above all, lest, alarmed by some phenomena which the searching element produces, you have recourse immediately to drugs to disperse them. The water-boils, for instance, which are sometimes, as I have before said, but by no means frequently, a critical symptom of the cure, are, in all cases that I have seen, cured easily by water, but may become extremely dangerous in the hands of your apothecary. Most of the few solitary instances that have terminated fatally, to the prejudice of the water-cure, have been those in which the patient has gone from water to drugs. It is the axiom of the system that water only cures what water produces. Do not leave a hydropathic establishment in the time of any "crisis," however much you may be panic stricken. Hold the doctor responsible for getting you out of what he gets you into; and if your doctor be discreetly chosen, take my word he will do it.

Do not *begin* to carry on the system at home, and under any eye but that of an experienced hydropathist. After you know the system, and the doctor knows you, the curative process may *probably* be continued at your own house with ease—but the commencement must be watched, and if a critical action ensues when you are at home, return to the only care that can conduct it safely to a happy issue. When at the institution, do not let the example of other patients tempt you to overdo—to drink more water, or take more baths than are prescribed to you. Above all, never let the eulogies which many will pass upon the *douche* (the popular bath), tempt you to take it on the sly, unknown to your adviser. The *douche* is dangerous when the body is unprepared—when the heart is affected—when apoplexy may be feared.

For your choice of an establishment you have a wide range. Institutions in England are now plentiful, and planted in some of the loveliest spots of our island. But as I only speak from personal knowledge, I can but here depose to such as I have visited. I hear indeed a high character of Doctor Johnson, of Stansted-Bury, and his books show great ability. Much is said in praise of Doctor Freeman, of Cheltenham, though his system, in some measure, is at variance with the received notions of hydropathists. But of these and many others, perhaps no less worthy of confidence, I have no experience of my own. I have sojourned with advantage at Dr. Weiss's, at Petersham; and for those whose business and avocations oblige them to be near London, his very agreeable house proffers many advantages, besides his own long practice and great skill.

Those who wish to try the system abroad, and shrink from the long journey to Graafenberg, Dr. Schmidt, at Boppart, proffers a princely house, comprising every English comfort, amidst the noble scenery of the Rhine, and I can bear ready witness to his skill; but it is natural that the place which has for me the most grateful recollections, should be that where I received the earliest and the greatest benefit, viz., Doctor Wilson's, at Malvern; there even the distance from the capital has its

advantages.* The cure imperatively demands, at least in a large proportion of cases, abstraction from all the habitual cares of life, and in some the very neighborhood of London suffices to produce restlessness and anxiety. For certain complaints, especially those of children, and such as are attended with debility, the air of Malvern is in itself Hygeian. The water is immemorially celebrated for its purity—the landscape is a perpetual pleasure to the eye—the mountains furnish the exercise most suited to the cure—"*Man muss Geberge haben*," "one must have mountains," is the saying of Preisnitz. All these are powerful auxiliaries, and yet all these are subordinate to the diligent, patient care—the minute, unwearied attention—the anxious unaffected interest, which Doctor Wilson manifests to every patient, from the humblest to the highest, who may be submitted to his care. The vast majority of difficult cures which I have witnessed, have emanated from his skill. A pupil of the celebrated Broussais, his anatomical knowledge is considerable, and his tact in diseases seems intuitive; he has that pure pleasure in his profession that the profits of it seem to be almost lost sight of, and having an independence of his own, his enthusiasm for the system he pursues is at least not based upon any mercenary speculation. I have seen him devote the same time and care to those whom his liberal heart has led him to treat gratuitously as to the wealthiest of his patients, and I mention this less to praise him for generosity than to show that he has that earnest faith in his own system, which begets an earnest faith in those to whom he administers. In all new experiments, it is a great thing to have confidence, not only in the skill but in the sincerity of your adviser—his treatment is less violent and energetic than that in fashion on the continent. If he errs, it is on the side of caution, and his theory leads him so much towards the restoration of the whole system, that the relief of the particular malady will sometimes seem tedious in order to prove complete. Hence he inspires in those who have had a prolonged experience of his treatment a great sense of safety and security. For your impatient self, you might sometimes prefer a brisker process—for those in whom you are interested, and for whom you are fearful—you would not risk a step more hurried. And since there is no small responsibility in recommending any practitioner of a novel school, so it is a comfort to know that whoever resorts to Doctor Wilson, will at least be in hands not only practised and skilful, but wary and safe. He may fail in doing good, but I never met with a single patient who accused him of doing harm. And I may add, that as in all establishments much of comfort must depend on the lady at the head, so, for female patients especially, it is no small addition to the *agrémens* of Malvern, to find in Mrs. Wilson the manners of a perfect gentlewoman, and the noiseless solicitude of a heart genuinely kind and good!

Here then, O brothers, O afflicted ones, I bid you farewell. I wish you one of the most blessed friendships man ever made—the familiar intimacy with Water. Not Undine in her virgin existence more sportive and bewitching, not Undine in her wedded state more tender and faithful than the Element of which she is the type. In health may you find it the joyous playmate, in sickness the genial restorer and soft assuager. Round the healing spring still literally dwell the jocund nymphs in whom the Greek poetry personified Mirth and Ease. No drink, whether compounded of the gums and rosin of the old Falernian, or the alcohol and acid of modern wine, gives the animal spirits which rejoice the water-drinker. Let him who has to go through severe bodily fatigue try first whatever—wine, spirits, porter, beer,—he may conceive most generous and supporting: let him then go through the same toil with no draughts but from the crystal lymph, and if he does not acknowledge that there is no beverage which man concocts so strengthening and animating as that which God pours forth to all the children of nature, I throw up my brief. Finally, as health depends upon healthful habits, let those who desire easily and luxuriously to glide into the courses most agreeable to the human frame, to enjoy the morning breeze, to grow epicures in the simple regimen, to become cased in armor against the vicissitudes of our changeful skies—to feel, and to shake off, light sleep, as a blessed dew, let them, while the organs are yet sound, and the nerves yet unshattered, devote an autumn to the water cure.

* Dr. Gully, whose writings on medicinal subjects are well known, is also established at Malvern, and I believe rather as a partner or associate than a rival to Dr. Wilson. As I was not under his treatment, I cannot speak farther of his skill than that he seemed to have the entire confidence of such of his patients as I became acquainted with.

And you, O Parents! who, too indolent, too much slaves to custom, to endure change for yourselves, to renounce for awhile your artificial natures, but who still covet for your children hardy constitutions, pure tastes, and abstemious habits—who wish to see them grow up with a manly disdain to luxury—with a vigorous indifference to climate—with a full sense of the value of health, not alone for itself, but for the powers it elicits, and the virtues with which it is intimately connected—the serene unfretful temper—the pleasure in innocent delights—the well-being that, content with self, expands in benevolence to others—you I adjure not to scorn the facile process of which I solicit the experiment. Dip your young heroes in the spring, and hold them not back by the heel. May my exhortations find believing listeners, and may some, now unknown to me, write me word from the green hills of Malvern, or the groves of Petersham, "We have hearkened to you—not in vain."

Adieu, Mr. Editor, the ghost returns to silence.

E. Bulwer Lytton.

CHEMISTRY IN ITS RELATIONS TO AGRICULTURE.

From the North British Review.

1. *The Relations of Chemistry to Agriculture; a Treatise, showing the intimate connection that subsists between Chemistry and Agriculture. By the Earl of Dundonald.* 4to, pp. 252. London, 1795.
2. *Elements of Agricultural Chemistry, in a course of Lectures for the Board of Agriculture. By Sir Humphry Davy.* Second edition, 8vo, pp. 479. London, 1814.
3. *Lectures on Agricultural Chemistry and Geology. By James F. W. Johnston, F.R.S.* 8vo, pp. 119; Appendix, pp. 116. Edinburgh and London, 1844.
4. *Elements of Agricultural Chemistry and Geology. By James F. W. Johnston, F.R.S.* 4th edition. 12mo, pp. 286. London and Edinburgh, 1844.
5. *Catechism of Agricultural Chemistry and Geology.* 11th edition, 12mo, pp. 52. London and Edinburgh.

There is no period in the history of a great country, in which the condition of the national agriculture ought not to form a grave subject of national consideration.

The positions we hold in regard to the duties and rights of a national agriculture are the following:—

1*st*, That the soil of a country is intended by the Deity to maintain the people who live upon it.

2*d*, That it is the duty of those to whom the tillage of the soil is intrusted, to see that the means of living are raised for the whole people—allowance of course being made for extraordinary seasons, which no skill or industry can avert.

3*d*, And that, if the tillers of the soil do not raise food enough for the whole people, a free access to foreign markets should be permitted, for the purpose of supplying the remainder.

Such appears to us to be a reasonable view of the duties and economical position of a national agriculture; and yet a wise government will prefer and will encourage the growth of a full supply of food on the home soils of the country. For though a state of war is an unnatural state among Christian countries, yet occasional long periods of war have been so much the rule in modern history, that no country can safely leave out of its political calculations a contingency which, when corn must be imported, might suddenly involve it in the most fearful calamities. We pass by the amount of encouragement we should be inclined to give to the home growth of corn, and the *shape* we think that encouragement ought to assume, because our present purpose carries us in another direction.

We have said that the soil of a country is intended to maintain the whole people of that country. For purposes of His own, it *may* please the Deity to multiply the people of an isolated spot, like our island, beyond the capability of the land to support them. But history furnishes us with no clear case in which He has ever done so. We read of famine and pestilence being sent as His avengers, but never that the land in ordinary seasons could not in any country be made to maintain the whole population.

"I will multiply thee," are words of blessing from the mouth of the Almighty, and we will not lightly believe that He has ever made them bear the curse of unavoidable famine to any industrious people. Above all, we will not believe that He intends so to punish our island, until we see every available resource made use of—the aids of science and of art everywhere called

in—and the capabilities of land and sea alike developed—which they are as yet far from having been. We rather see in the increase of our population a new stimulus to search for and avail ourselves of the inexhaustible stores of good He has everywhere laid up for us, and which He the more lavishly lays open, the greater the amount of bodily and mental labor we expend in the search for them.

It is, then, we believe, the duty of the agricultural body to develop to the utmost the capabilities of the soil—at least to neglect no means within their reach to render the home growth of food equal to the demands of the home population.

And of this duty the cultivators of the British soil have neither been unaware nor altogether neglectful. The art of tillage has not been standing still among us during the last two centuries. It has, on the contrary, during that period, made vast strides, though it has not fully kept pace with a population to the increase of which our manufacturing prosperity has given so extraordinary an impulse.

It is interesting, however, to trace how, out of one almost fortuitous advance in practical agriculture, all the improvements which have taken place during this period, have, one after another, naturally, we may almost say necessarily, sprung.

It was probably little imagined by those who first recommended the turnip for field culture, that it was to be the means of introducing an entirely new era into the agricultural practice and productiveness of the country. And yet such has been its effect: and no other vegetable is yet known, the general culture of which in our climate could have produced the same results. Thus,

1. To consume the turnips more cattle were kept. These cattle were valuable, both in manufacturing beef and in converting vegetable matter into enriching manure. But the same quantity of turnips was found to add more to the weight of one animal than of another. Attention was thus more generally drawn to the distinctions of breeds—to the value of family and individual constitution among our domestic animals. Societies were formed for the encouragement of improved breeds—cattle shows were instituted—premiums were given—and thus that remarkable revolution has been brought about which enables the stock farmer to bring to market an animal of little more than two years of age, as heavy, as fat, and more esteemed by the consumer, than those which were slaughtered for our forefathers at the age of six or seven. Then,

2. The larger production of enriching manure by the increased and better fed stock, gradually produced an almost equal revolution in the growth of corn. Two consequences especially remarkable have followed from the continuance of this practice of richer manuring—the old corn lands have been made to yield an increased produce of nearly one half, while the poor and valueless soils of former days now grow crops as large and heavy as were reaped from those which were then called rich.

3. But this rearing and fattening of stock, besides the turnips for winter food, demanded early grass for their keep in spring when the supply of roots was exhausted, or when they ceased to retain their wholesome and nutritive qualities. Thus the artificial grasses, the clovers, ryegrass, foxtail, and numerous others, were tried and recommended as giving a rich and early bite of grass in spring, or a more abundant crop of hay in autumn. A new traffic, that of agricultural seeds, sprung up, and this system of green cropping, as it is called, obtained not only a wide extension, but a permanent and established place in British husbandry.

4. Yet the greatest benefit of this green cropping does not consist in the larger amount of food for cattle, which it enables the farmer to raise on the same extent of land, without lessening the quantity of corn he yearly carries to market. The introduction of a skilful rotation or course of cropping to which it has led, is of far more importance in a national point of view. The practice of taking corn crop after corn crop—even as far, in Scotland, as fifteen or twenty crops of oats, or till the produce fell to two or three seeds—has not yet entirely disappeared in remote parts of the country. Nothing could be more ruinous to the land than such a course of procedure—nothing so likely to impair the future average produce of corn in districts in which it existed.

It is difficult to bind down either farmer or proprietor to any other mode of culture than that which seems likely in *his time* to yield the largest profit. Mere abstract condemnations of the old system of corn after corn were of little benefit in arresting the evil. But when it came to be seen that more money was to be made immediately,

while the land was also longer kept in heart, by alternating a green crop with one of corn, the temptation to the evil practice was removed, and the *alternate husbandry* carried the day among all intelligent men, *and wherever the land was considered fitted for the growth indifferently of either crop.*

5. Meanwhile, this new husbandry demanded a more constant and careful working of the soil. New modes required new instruments; these new instruments being contrived and made by men familiar with all the resources of modern mechanical skill, to accomplish a definite end at the least cost of material, and with the least expenditure of physical force, brought into glaring prominence the defects of the older agricultural machinery. Hence the heavy wooden gave place to the lighter iron ploughs —the lumbering four-horse wagon was succeeded by the quicker two or one-horse cart —and gradually the grubber, the improved (Finlayson's and others) harrow, the horse-hoe, and the scarifier, began to do portions of the work of the plough, and thus to admit of the spring seed being put in upon clay lands at an earlier period of the year. Those who are familiar with the tillage of Essex, Hertford, and Suffolk, are aware of the benefits which, in these counties, have been derived from sowing barley upon their clay lands in January and February, instead of, as formerly, in April and May.

6. These lighter implements suggested quicker work. The drill and the horse-hoe could not be permitted to linger in the land, like the old Berkshire plough, nor the hind to drag his slow foot behind them as his father had done in ploughing his ancient furrow. Thus horses of a quicker step were sought for, and improved breeds, like the Cleveland coach-horse, uniting a quick step with great strength and endurance, gradually replaced, in improving districts, the old, heavy, and cumbersome races. "My father," said a Staffordshire farmer to us once, when speaking of this subject—"My father kept fourteen farm-horses, and was always behind with his work. On the same farm, I employ only eight, but they have a little blood in them, and my work is never behind."

7. We have said that the alternate husbandry was introduced wherever the land was considered suitable indifferently for either crop. On stiff and wet lands, which abound in many countries, it was found that the turnip could not be grown with advantage; upon such soils therefore, the alternate husbandry could only be partially introduced. The next step was so to dry, and loosen, and mellow these soils, as to fit them for the growth of green crops. This was accomplished by the introduction of a system of thorough draining, by which the excess of water was carried off, and the air was permitted to enter the soil. Experience has shown, that such a system of drainage does loosen the stiffest soils, and many practical men assert, that there is no clay so stiff in which a skilful farmer may not now be able to raise a profitable crop of turnips.

To the drain succeeds the subsoil plough. There are few soils upon which it ought not to be called in to perfect the stirring of the land; there are as few, we believe, by which the expense of using it will not be amply repaid.

To this stage of improvement the practical agriculturists of Great Britain may be said to have generally advanced. Nearly all now concede the value of the drain, and many acknowledge the efficacy of the subsoil plough. They have obtained admission into large tracts of country, and they are struggling hard to force an entrance into many more. In a former article, we showed how wide a field lay open for the expenditure of capital in the general drainage of the country—how profitable such an outlay was likely to be to the individual cultivator —and how important to the nation at large. It is interesting to bear in mind, that the introduction of the turnip has given rise to the entire series of improvements to which we have adverted, and the culture of the turnip is still the *immediate* object for the more general attainment of which these latest improvements are sought to be introduced.

All the improvements above adverted to are connected either with the improvement of the live stock, or of the machinery and mechanical operations of the farm. But a new start has lately been taken by the art of culture in this country; and it is beginning to vindicate to itself something of the dignity of a science.

The practical cultivator does not readily see how science is to lessen his labor and anxiety, to enlighten his path or to increase his profits. The uninstructed proprietor understands as little how science is to benefit him, while the public at large are by no means aware how much the general welfare of the country is likely to be promoted by the extended application of the results of

scientific research to the cultivation of the soil. What is the nature, then, of this scientific knowledge, which is to be brought to bear upon the general improvement of agriculture? Of what real value is it likely to prove to the practical man? Of what benefit to the country at large? These questions will be, in some measure, answered by the following sketch:—

The soil is the first care of the husbandman. This he tills, and labors, and weeds, and from this he reaps the reward of his labors. The plants are his reward; they grow upon the soil; their kind and quantity are regulated by it. The nature of the soil and the growth of the plant are therefore intimately connected.

Again, the plant feeds the animal. On vegetable food ultimately all animal life appears to depend. The animal, therefore, is inseparable from the plant. The soil might exist without the vegetable, and the latter might live and die though there were no animals to feed upon it; but the animal is the creature, as it were, and the consequence of both. It may be likened to the roof of a structure, of which the plant forms the walls and the soil the foundation. The dead earth, the living plant, and the moving animal are thus intimately connected. Man, the highest of living things, not only treads upon the dead earth, but grows out of it, and is separated from it only by the intervention of vegetable life. How truly is the earth our mother, and we children of clay!

But not only are they thus mutually dependent, but they actually resemble each other in their nature. Take up a particle of soil, and burn it in the fire; its color will change and it will diminish in weight. A part of it burns away, but the greater proportion resists the action of the fire and remains behind. Take a plant of any kind, and put it in the fire; it will nearly all disappear, but a small quantity of ash will remain, which the fire does not affect. Do the same with the bone or flesh of an animal, and the result will be the same. It will burn like the plant, but, like it, will leave something behind which defies the action of the fire. Thus the soil, the plant, and the animal, alike consist of two kinds of matter: one which burns away, or is combustible—another, which does not burn away, or is incombustible. To the former chemists give the name of *organic*—to the latter, that of *inorganic* matter.

In the soil, however, the organic matter rarely exceeds, and is usually considerably less than *one-tenth* of the whole weight; while in the plant and the animal it is rarely less, and is usually more, than *nine-tenths* of the whole. While there is a general resemblance in composition, therefore, there is also an important special difference between the soil, and the plants and animals that live upon it.

But let us study the soil a little more particularly. Whence are soils derived? Of what do they essentially consist? What is the nature of the differences which prevail amongst them? Upon what do their different agricultural values and capabilities depend?

The visiter to Edinburgh who walks along Salisbury Crags sees a long sloping bank beneath him, consisting of fragments of the crumbling rock, which, through lapse of time, have accumulated at the base of the cliff, and formed this sloping *talus*. The air, and rain, and frost, have torn down the solid rock, and sent its rolling fragments into the valley below. The seeds of plants have grown up among the loose materials—their roots have often penetrated into the very substance of the fragments, and have caused them to crumble still further. These plants have died, as well as the insects that lived upon and among them, and have left their remains intermingled with the rocky dust. Thus a soil of mingled earthy and organized matter has been produced; and in a similar way the soils of Arthur's Seat, of the Queen's Park, of the Calton Hill, of the Pentland range, and of the Ochils and Lomonds beyond the Forth, have all been formed.

Such is the *general* history of all soils. The solid rocks have furnished their inorganic or incombustible part—the remains of animals or vegetables have furnished the organic part which disappears or burns away in the fire.

But rocks differ essentially in their nature. Some consist of granite, like the heights of Dartmore, or the Wicklow mountains, or the Highlands of Aberdeenshire—others of trap or basalt, like Arthur's Seat and the Giant's Causeway—others of numerous beds of slate, like much of Cornwall, North Wales, and Southern Scotland—and others again of limestone, like the blue rocks of Northumberland and the Pennine chain, or the yellow Dolomites, which stretch from Durham to Nottingham, or the white chalks which cover so large a portion

of Wiltshire, Hampshire, and others of our southern counties.

If rocks thus differ in their nature, it is obvious that the loose materials which are formed by their decay must differ in like manner—must resemble, that is, in their nature and composition, the rocks on which they rest and from which they have been derived. Hence the natural differences which are observed among soils of different districts, and hence also the striking similarities by which soils are sometimes found to be characterized over very large areas.

From the crumbling of a limestone is formed a calcareous soil; from the fragments of a sandstone an open and often a hungry sandy soil; from a slate rock a clay more or less cold, stiff, and impervious; from a trap an open loam, usually reddish, rich, and fertile. Thus, a geological map which represents by its different colors the areas covered by rocks of different kinds and ages, represents also the *general* nature, capabilities, and limits of the several soils to which the fragments of these rocks have given rise. And this is the basis of a close, a very interesting, and a practically useful connection between agriculture and geology, which we cannot now dwell upon, but which our readers will find illustrated and brought out in the works of Professor Johnston, of which the titles are prefixed to the present article.

But this general knowledge of the origin and main cause of the differences in agricultural value which are observed among different soils, is not sufficient to guide the practical man in his economical operations. The rocks differ, and the soils differ with them. But in what respects do the rocks really differ? What chemical diversities prevail among the worn and weathered fragments which form our soils? These questions have been answered by the chemical analysis of numerous soils of varied qualities, and from all parts of the world. These analyses laid the foundation of that distinct though still imperfect perception we now possess of the differences and capabilities of soils, and of the means by which they are severally to be improved.

Thus, it has been found, that a soil which is so naturally fertile that it will grow a long succession of crops without any addition of manure, always contains in its inorganic part a *notable* quantity of ten or eleven different chemical substances. These are potash, soda, lime, magnesia, alumina, silica, iron, manganese, sulphur, phosphorus, and chlorine. Soils which require no manure are thus constituted, and there are many such among the virgin soils of all our colonies. From whatever quarter of the world such soils are brought, they are found to contain all these substances, some of them in large, others in small, but *all* of them in sensible quantity.

On the other hand, such soils as require to be manured—which will not naturally grow good crops, or which will not grow crops at all—such soils have been found either to be wholly devoid of one or more of those substances, to contain them in too small proportion, or to have some of them present in too great an excess. Thus the nature of the chemical, and consequently the main cause of the practical differences being known, the method of removing these differences springs up of itself almost without an effort of thought. Make the soils chemically and physically alike, and you will make them agriculturally equal. Add what is wanting in the less productive, and bring it into the same physical condition, and you will make it equal to the more productive. Take away what is in excess in the one, and you will make it as valuable as another from which it differs only by this excess. If it contain too great an abundance of saline matter—as the plains of Egypt, of India, and of Attica, in many places do—remove this saline matter, and you enable the elements of fertility which the soil contains at once to manifest themselves. Thus, there is no soil so hopelessly barren—if parching drought and binding frost be absent—on which the traces of human skill and industry may not be successfully and profitably left.

On these principles, though unknown to him, the successful farmer has always acted. If a soil, which when left unaided, gave no remunerating return to the cultivator, yet gave him when regularly manured an abundant harvest, it was because the manure added to the soil those things in which it was deficient, and brought it up for the time to something like the composition of more naturally favored spots. Or if the addition of one substance only to his land—of gypsum, of wood-ash, of nitrate of soda, or of burned bones—was often effectual without other manure, in causing good crops to grow where they had refused to grow before, it was because the absence or deficiency of one only of the ten ingredients of a fertile soil was sufficient to render his fields unproductive.

But further, soils change in character by continued cropping. The most naturally fertile decline gradually in value and productiveness. They sink slowly down into the class of soils which yield abundant crops only when they are regularly and abundantly manured. What was the cause of this? Did the soil gradually lose some of its constituents? Did the manure constantly restore them? If so, which of its constituents had the soil lost during this degenerating process? What had carried them off? Where had they gone to? Could they be recovered? How, and in what form did the manure restore them?

Again, why were all these constituents necessary to the fertility of a soil? It had been discovered by analysis, that the most fertile soils always *did* contain all these substances. But *must* it of necessity contain them all? If so, *why* were they necessary—what purpose did they serve?

All these questions, and many more of a kindred character, were answered by a careful study of the plants themselves, which grow naturally, or which are raised by art on our various soils. Let us turn our attention, then, to the plant.

All vegetable substances, as we have already seen, consist of a combustible and an incombustible part. This incombustible part—the ash they leave behind when they are burned—forms, in general, only a small proportion of their weight. A hundred pounds of wheat leave when burned something less than two pounds of ash, the same weight of dry wood often leaves less than half a pound, while straw and hay leave from five to ten pounds from every hundred. Thus the proportion of ash varies from half a per cent. to 10 per cent. of the weight of the dried plant.

Is this small quantity of incombustible matter really necessary to the plant, and essential to its growth? If 100 lbs. of dry oak wood leave only six ounces of ash when burned, can these few ounces really be of essential moment to the existence and health of the tree? The analysis of the plant answers that this ash is *never* absent, and is therefore, without doubt, in some way necessary to the growing crop. How it is necessary, and why—with a view to what important natural end—was deduced from a beautiful train of research, subsequently entered upon, and to which we shall by and by advert.

But whence do plants derive this inorganic matter they always contain? It is taken up by the roots from the soil. Other portions of their nourishment—much of that, for example, which forms their organic part—plants draw from the air, but that which produces their inorganic part is derived wholly from the soil. This fact is connected with a further series of experimental results, by which light has been thrown upon agricultural practice and experience. Some plants, as we have said, leave more ash than others, and in some parts of the same plant it is more abundant than in other parts. A ton of leaves, for example, often contains ten times as much as a ton of the wood of the same tree, and a ton of straw contains five or six times as much as a ton of grain. But if it be wholly taken from the soil, that plant, or that part of a plant which contains the most, must exhaust the soil the most. Thus, one clear reason appeared for what had been so long observed by practical men. Crops exhausted the soil, because they actually took up and carried off a portion of its inorganic substance—and one crop exhausted the soil more than another, because it robbed it of a larger proportion of these inorganic substances.

Of what kinds of matter did this ash consist? It was taken up from the soil, but was it taken up indiscriminately and at random from the whole soil? Or were certain substances selected by the roots, and sucked up out of the soil in preference to others? These questions suggested two inquiries to the analytical chemist. First, what is the general composition of the ash? and second, what special differences exist among the ashes of different plants, and of different parts of the same plant?

1st. *The nature of the ash.* When subjected to a rigorous chemical analysis, the ash of the plant, like the incombustible part of the soil, was found to contain nine or ten different substances. These were potash, soda, lime, magnesia, silica, iron, manganese, sulphur, phosphorus, and chlorine—the same exactly as are present in the inorganic part of the soil. They are to be detected in greater or less proportion in the ash of all our cultivated crops, and they are wholly derived from the soil. Here at once a bright light casts itself back upon the constitution of the soil itself. All fertile soils—so careful analysis had said—*did* contain a notable proportion of all these substances; but the reason did not appear. This reason now breaks in upon us of itself. The plants contain all these things;

they form a part—a necessary part, as we shall afterwards see—of its substance; and as it can get them only from the soil, it is clear that the soil *must* contain them, if the plant is to grow in a healthy manner upon it.

But there is a special difference between the soil and the ash of the plant, which it is interesting to notice. Among the constituents of the soil, *alumina*—the substance which gives their stiffness and tenacity to clays—holds a prominent place. In the plant it is rarely found, and always in inconsiderable quantity. The presence of this substance, therefore, is a character by which the soil is distinguished from the ash of the plant. Its functions in relation to the growth of plants are very important, but these functions are chiefly performed in the soil itself.

2d. *Special differences in the quality of the ash.* But though every plant we cultivate, taken as a whole, leaves an ash, in which all the above substances are to be found, yet that which is left by different parts of the same plant contain them in very different proportions.

We have already seen that the absolute quantities of ash left by the leaves and the stems, by the straw and the grain, are very different, but the nature of the ash left by these different parts also varies. It has been found, for example, that the same sample of Hopeton oat ga ve fromits several parts an ash which in 100 lbs. contained respectively of sulphuric acid and alkaline matter, the following very different proportions:—

	Potash and Soda.	Sulphuric Acid
Grain, . .	31.15 . .	2.54
Straw, . .	18.24 . .	23.00
Leaf, . .	15.68 . .	15.23
Chaff, . .	4.36 . .	6.51

And not only are the proportions of the several substances unlike, but in certain parts of the plant some of them are almost entirely absent. Thus, the grain and the straw of wheat leave an ash which contains of phosphoric acid* and silica respectively,

	Phosphoric Acid.	Silica.
Grain, .	50 per cent.	None.
Straw, .	1 to 3 „	30 to 60 per cent.

The presence of phosphoric acid in large proportion characterizes the grain, while that of silica in large proportion characterizes the straw.

Similar results are obtained by the examination of the ash of different plants. Some contain more lime and magnesia, others more potash and soda, others more sulphur, or phosphorus, or chlorine; and thus the general law appears to hold, that under precisely the same circumstances one kind of crop will usually take up from the soil more of one kind of inorganic matter, another crop more of another kind.

In its relations to practical agriculture, this result of experiment involves two distinct conclusions.

1. As different parts of the same plant require different proportions of these inorganic substances, they must, at different seasons of their growth, draw these substances in different proportions from the soil—more of one thing at one time, more of another thing at another. They may flourish, therefore, on a given soil, at one period of their growth, and not at another. That soil which clothes the tree with luxuriant verdure, may yet not be able to ripen its fruit—that which causes the straw to rush up to early maturity may refuse to fill the ear.

2. As different plants also draw from the soil the same substances in unlike proportions, they will grow with unlike vigor in different soils. Hence that which bears a profitable crop of one kind, is often unable to yield a good return of another—hence also the varied flowers and herbage which diversify the surface of all our fields.

The beautiful principle involved in these conclusions, is susceptible of so many interesting applications—explains so many practical points long known, though little understood—and is so rich in suggestions for the future improvement of every branch of husbandry, that we may be permitted to pause a little here with the view of presenting to our readers one or two of the more intelligible of the illustrations which start up in crowds before us.

Thus, in regard to *exhaustion*—the nature of which we have already, in some measure, learned to understand—this principle showed that it might be of two kinds, produced in different ways, and demanding each its peculiar mode of cure at the hands of the economical farmer. It might be a general exhaustion, by which, through long cropping of various kinds, the soil had become generally poor in all those varieties of

* Phosphoric acid is produced when phosphorus is burned in the air. The white fumes given off by a lucifer match, when it first kindles, consist of phosphoric acid. This acid exists largely in bones.

inorganic food which plants require. Or it might be a special exhaustion of some one or two substances only, caused by the long continued and successive growth of crops of the same kind of plant.

A familiar example will show how these different forms of exhaustion—both alike fatal to the fertility of the soil—may be severally produced. The grain, as we have seen, contains much phosphoric acid, and the straw much silica. Together they carry off largely from the soil all those substances for which the plant is dependent upon the soil. Carry away both straw and grain to market, and you year by year remove from the soil those things which feed both ear and straw—you will therefore gradually produce a *general* exhaustion. But return the straw to the soil again, in the form of manure, and you deprive it of those things only which are especially necessary to, and are present in, the grain you sell. Continue this, however, for a series of years—as has been too much done in almost every country of Europe—and you will ultimately so rob the soil of those phosphates* which abound in the grain, that your fields will cease to yield you a remunerating crop.

The cause being known, the remedy is apparent. When the land is generally exhausted, a manure must be added which shall contain, and therefore convey to it, an adequate supply of all the things which all our crops and their parts conjointly, carry off. When it is specially exhausted, the addition of one or more of these substances will be sufficient.

It is not necessary now, as in the olden time, to add ton after ton of farm-yard manure, which contains a certain proportion of all that the plant requires, but does not specially abound, in the phosphates or other substances, which the soil may happen especially to be in want of. To add enough of these last, it may be necessary to lay on farm-yard manure in very large quantity, and at a great cost, and after all the farmer may wonder that he has only imperfectly succeeded in restoring his worn out fields. A knowledge of the composition of the ash, shows us that the addition of one or two things may be sufficient to produce the desired effect, and that the addition of these things may often be made at a comparatively moderate cost. What the things are which any given soil especially requires, is to be determined by a joint consideration of the kind of treatment to which the land has previously been subjected, and of its actual composition, as determined by a rigorous chemical analysis.

This principle throws further light also upon the *rotation of crops*. It is better to prevent the special exhaustion we have been speaking of than to cure it. It is often difficult to discover what the land really requires, and, therefore, to cure the evil when it exists. The only method of preventing it with which we are yet acquainted, is by the introduction of a skilful rotation or alternation of unlike crops.

In adopting such a rotation, we only copy from nature. In the wide forest, many generations of broad-leaved trees live and die, and succeed each other; but the time comes at last when a general pestilence seems to assail them all—their tops droop and wither, their branches fall off, their trunks rot. They die out, and a narrow-leaved race succeeds them. This race again has its life, of centuries perhaps; but death seizes it too, and the expanded leaf of the beech, the ash, and the oak, again cheer the eye—playing with the passing zephyrs and glittering in the sun. So in the broad meadow, the old pasture changes, and new races of humble grasses succeed each other as the fields increase in age. The alternation of crops, therefore, asserts to itself something of the dignity of a natural law, and man is evidently in the right course when he imitates nature in a procedure like this.

But upon what do its good effects depend? Why do the broad leaves alternate with the narrow in the ancient forest? Why do the grasses change in the old meadow? Why does the farmer obtain a larger produce, and for a greater number of years, by growing unlike crops alternately, than by continuing year after year to grow the same?

The reason is not merely that one crop carries off more, and another crop less, of all those things which all our crops derive from the soil, but that one crop carries off more of one thing, another crop more of another. The grain carries off phosphorus, the straw silica, the bulb alkaline matter. After, perhaps, fifteen or twenty successive crops of the same kind, the surface soil through which the roots are spread becomes so poor in those substances which the crop specially requires, that the plant cannot obtain from it a sufficient supply to nourish and

* Phosphoric acid unites with lime, magnesia, &c., and forms *Phosphates*.

bring to maturity the full-grown plant, within the time allotted to it in our climate for its natural growth. The roots do their best; they collect as diligently as they can, but winter comes on, and the growth ends before the plant is fully matured. In the case of corn, the first effect of a scarcity, say of phosphoric acid, is to make the ear smaller and the number of grains less; the next to continue the growth into the winter, and only when a very fine season occurs to ripen the ear at all.

But suppose we alternate the corn crop, which in its grain carries off phosphoric acid, with a hay crop, which requires much silica, or a root crop, to which much alkaline matter is necessary—then the one crop would live upon and remove what the other had left in greater abundance. Instead of robbing the soil every year of the same substances, we should be exhausting it more equably of all, and we should be able, for double the time at least, to crop it without the risk of its ceasing entirely to give us a profitable return. We should gradually work up also every available substance in the soil, whether such as are naturally present in it, or such as we have ourselves added in the form of manure.

What is true of the simple alternation of a corn with a green crop, is more true still of a longer and more complicated rotation. The greater the variety of crops we grow, and the longer the interval between the successive crops of the same kind, the more perfectly do we avail ourselves of the benefits which an obedience to the suggestions of this principle is fitted to confer upon us. No rotation, it is true, however skilful, will alone prevent the land from becoming ultimately exhausted. Nothing but regular and generous manuring will do this, unless there be, in springs from beneath, or in the decaying fragments of rock mixed with the soil, or in substances brought down from higher grounds, or in the nature of the rains that fall upon the land, some perennial source of those substances which the crops always carry off from the soil. But in a skilful rotation there is this virtue, that land which is subjected to it cannot be ruined in so short a time. If one tenant use it ill, it may come into the hands of another before the ruin is so far irremediable, that the farmer who has a rent to pay cannot reclaim it with a prospect of immediate profit to himself.

But let us apply our principle next to the illustration of a well-known practical fact.

The addition of lime to the land has in nearly all well cultivated countries extensively prevailed at every period of authentic history. In Europe its use has been universal, and everywhere the same observation has been commonly made, and has become a proverb in almost every language. "Lime," the proverb says, "enriches the fathers, and impoverishes the sons." Laid on in repeated doses, and for a length of time, the luxuriant crops it raises at first gradually fall off, till at length even with the *stimulus*, as it is called, of larger doses, the land refuses to be excited.

A like result has been observed of late years from the application of gypsum, of nitrate of soda, of common salt, or of saltpetre. Their good effects were apparent for a certain number of years, but they gradually ceased to act, and the land was afterwards believed to be *weaker* and less productive than before.

How are these results to be explained? Can this apparent exhaustion be prevented? Can it easily be remedied? Is it a necessary consequence of the use of lime, and of the other substances we have mentioned? Is the manure or the farmer to blame for the result?

The plant carries away from the soil say ten substances. The soil is deficient in one of these, and the plant cannot grow. That one is lime or soda. You add it to the land, and your crops spring up luxuriantly. Rejoiced at this result, you add more lime, and your crops still grow well—for it requires the addition of three or four hundred bushels to an imperial acre to add one per cent. of lime to a soil which is twelve inches in depth. But after many crops, the lime at length ceases to benefit the land, the crops are even smaller than they were before lime was first added, and the farmer is at a dead stand.

Now what has he been doing all this time? He has been adding *one* thing only in his lime—he has been carrying off *ten* in his crops. Is it any wonder, then, that after a lapse of years, the land should become poor in one or more of the other nine? The iron-smelter throws into his furnace his ore and his coal, but he gets no metal until he puts in lime also. He adds a dose of lime, and he draws off a running of metal. He adds more lime, and he procures perhaps more iron. But he very soon finds that lime does no further good; he has melted out all the iron; he has exhausted his furnace; the stimulus of lime has no effect.

He must add ore and coal again, and again he will obtain his periodical flows of metal

So it is with the soil. The farmer who hopes by the continual addition of one thing, to make his land produce continual good crops, hopes and acts against reason. It is his fault that the land has become exhausted, and the cure is in his own hands. Lime, therefore, does not necessarily "impoverish the son." But any treatment will ultimately make the land poorer which does not return to the soil all the things which the crops have carried off, and at least in equal proportion.

"But the land recovers from its exhaustion without any addition," says the farmer, "if I only leave it to itself for a sufficient length of time. So it does, no doubt, to a certain extent. The Deity is full of bounty to careless and ignorant and inconsiderate man, and makes all nature work to do him good, and to repair his often wilful waste. The rains brought by the sea-winds, shower down upon some spots an abundant supply of certain of those things which the crops carry off—it may be the very things in which the soil is deficient. Others, again, are replenished by springs from beneath, or by the crumbling of the rocky fragments which are mingled with their surface-soil, while on many spots the grasses and other herbage which spring up send down their hidden roots to the depths of the under soil, and slowly and gradually bring up and enrich the surface with a sufficient supply of those substances of which the numerous crops had robbed it. In all this we see infinite cause to revere the bounty and goodness of the ALL-DIRECTOR—none to justify the negligence or waste of the unskilful farmer.

But from the inorganic portion or ash of the plant, let us now turn to that of the animal. The several parts of the animal body leave, when burned, a quantity of ashes. This we have already stated as establishing a general analogy between the plant and the animal. But the analogy is closer than this. For, first, the proportion of this ash varies in different parts of the animal as it does in those of the plant. The fresh bone leaves one half of its weight when burned, the fresh muscle not more than one hundredth part. Yet, as is the case with the plant, the small proportion present in the muscle is as essential to its constitution and healthy existence, as the huge quantity in the bone. The composition of each part is specially adapted to the purposes it is intended to serve.

Again, of what substances does this ash consist? It contains the same substances as are present in the ash of the vegetable food which the animal eats. There are found in it potash, soda, lime, magnesia, oxide of iron, oxide of manganese, sulphur, phosphorus, and chlorine. Thus the analogy between the soil, the plant, and the animal, becomes closer and closer at every step.

But there is a striking difference among the three in respect to their inorganic part. Thus it may be given as a *general* characteristic of each that

The *soil* contains silica and alumina.
The *plant* contains silica and no alumina.
The *animal* contains neither silica nor alumina.

The alumina gives consistence and tenacity to the soil; the silica gives strength and firmness to the stem of the plant. For such purposes, the animal does not require their aid, and, therefore, they do not enter into the constitution of the animal body.

Looking back for a moment to the plant, we now see not only that all these substances are essential to the growth and existence of the plant, but *why* they are and must be so.

In adorning and beautifying the earth, plants serve only a subsidiary purpose. It has, indeed, pleased the Deity to invest them with forms and colors which are grateful and refreshing to the eye of man, but to impart this gratification is not the end or purpose of their being. Their real function is to prepare and minister food to the animal races.

Now, this function they could not perform, unless they contained all that is required to build up the several parts of the animal body. Is it not a beautiful provision, therefore, that plants should be unable to grow where they cannot procure that which it is their natural purpose and duty to procure for the animal? To the instructed ear, the plant seems to have acquired a voice. "I need not grow here. I should be of no use if I did. I should only cheat the senses of the unsatisfied animal, exhibiting the semblance without possessing the substance of its natural food." The soil, therefore, *must* contain all the substances we have named, because the plant refuses to grow without them; the plant *must* contain them all, because the animal could not live unless they were present in its vegetable food. How much stronger at every step becomes the likeness between the soil, the plant, and animal—how much closer their connection

—how much more indissoluble the union that binds them together?

When dry bone is burned, the ash that remains behind amounts to two-thirds of its weight, and consists almost entirely of those phosphates of lime and magnesia which we have already seen to be so abundantly present in the ash of different varieties of grain. This *bone-earth*, as it is called, must exist in the soil. The plant draws it from the earth by its roots. The cow eats it in the herbage she crops from the fields, and parts with it again in the milk she produces to feed her young. The calf sucks the milk, and works up the phosphates it contains into the form of living bone, adding daily to their size and weight. Without bone, our present races could not exist. It forms the skeleton to which the soft parts are attached, and by which they are supported; but the life of the animal being at an end, the function of the bone, as a living thing, is discharged. It falls to the earth, and new plants take up its phosphates again, to send them forward on a new mission into the stomachs of other living and growing animals. How beautiful is all this!

It may be reasonably asked, why the food we eat, the bread and the flesh-meat alike, should necessarily contain, at every period of our lives, a certain supply of these phosphates. We can readily understand the necessity for their presence in the milk and other natural food of *young* animals, which are daily adding to the size and strength of their bones, but why need they be eaten by animals which are full grown—in which the bones have already attained their full size and weight? The explanation of this is to be found in an interesting law of animal existence.

The bodies of animals are continually undergoing a series of invisible changes of substance, of which they are entirely unconscious. We look at our hand to day, as we write, and we fancy it is the same in substance as it was yesterday, or last year—as it was ten years ago. The form of each finger, of each nail, is the same. Scars made in our infancy are still there. Nothing is altered or obliterated; and yet it is not the same hand. It has been renewed over and over again since the days of our youth. The skin, and flesh, and bone, have been frequently removed and replaced. And so it is, more or less, with our whole body. The arms and limbs that sustained us in our schoolboy struggles, are long since consigned to the dust, have, perhaps, lived over again more than once in plant, or flower, or animal. In from three to five years, the entire body is taken out and built in again with new materials. A continued activity prevails among the living agencies to which this hidden work is committed. Every day a small part is carried away, just as if a single brick were every day taken out of an old wall, or a single wheel out of a watch, and its place supplied by another.

Into the purpose for which this change takes place, we do not at present enter: it is sufficient that the fact is certain. The body therefore requires constant supplies, at every period of its life, of all those things of which its several parts are built up. A portion is removed every day from the bones and muscles of the old animal, and is rejected in its dung. Its food, therefore, must be able to supply the materials out of which a new portion of bone or muscle may be formed.

How interesting—how lofty, are the reflections which this fact awakens in connection with our frail being, and with our tenure of this mortal life! "We die daily," receives here a new sense. Day by day we lay down in the dust a new portion of our earthly substance. Day by day we gather up the fragments of former bodies, to build up anew our wasting frames. How are we thus daily reminded of our true origin,—"He formed man out of the dust of the earth;" of our true nature,—"Dust thou art;" and of our speedy fate,—"To dust shalt thou return." Our connection with the dead earth is never for a moment loosened. We draw upon it for our hourly food. In the midst of our most vigorous life, we are connected with it by a chain which cannot for a moment be broken.

It cannot be broken, that is, without certain death. For what follows if we merely attempt to loosen the natural bond between the soil and the animal? The herbage which the cow eats draws phosphates from the soil. Suppose the soil to be deficient in these substances, then plants will grow upon it, which require little of them, and which will therefore contain little. If the cow be turned in upon these, she might possibly, by hard labor, extract from them enough of every thing she requires to keep her alive; but she has a calf to sustain also. She continues to form milk, therefore, to feed and nourish her calf; and, if necessary, she will even draw a daily portion from the substance of her own bones, to minister

to the growing bones of her young. But this interesting provision is only temporary. It is an adaptation in the economy of the cow, suited to any sudden emergency by which the health of the suckling might be endangered. Let the deficiency of bone-earth, therefore, in the food continue, and mother and young will become weak together—both will lessen in weight and strength—they will droop and die. They cannot be long independent of the quality of the dead earth on which they tread.

It is easy to see how, out of a beautiful principle like this, when once established, numerous practical applications and explanations of known facts should naturally flow. It is self-evident, that whatever is found in the ash of the healthy animal body must exist in the soil upon which animals are to find the means of living. If any of these are naturally absent or deficient in it, we may be quite sure that it is necessary to add them, and that the soil will reward us for the gift. Has our husbandry been of a kind to exhaust it of some of these things?—then these must be first restored, before it will again carry the same amount of stock, or feed as many men.

Has the land, for instance, been long cropped with corn, the addition of bones which contain the phosphates may give corn crops again where they had ceased to grow, or may cause them to ripen where previously the climate was considered unpropitious. How often are the laws of nature blamed for what is due only to the ignorance or indolence of the cultivator!

Or has the land been long submitted to dairy husbandry, and does it now produce a poor herbage?—do the cows give little milk, and are the calves stunted?—then it is probable, that the land has become poor in the materials of bones. A single milk cow removes from the soil every year in its milk and annual calf, what is equivalent to fifty pounds of bone dust.* This must, after a time, affect the herbage; and through it, the milk of the cow, and the growth of the calf. To add bone to the calf, therefore, you must add bone dust to the land. How curious is this!

Or if our cattle are stall fed, this knowledge of what the animal requires teaches us to select our food according to the special circumstances of age, condition, &c., in which they may happen to be placed, or to the immediate purpose for which they are fed. We can readily select a kind of vegetable food which shall either promote in the greatest degree the production of an enriching milk, or shall make the growing bones of the calf stronger or slighter according to the purpose for which we wish to rear it.

Thus the manuring of the soil, the raising of corn and grass, the production of milk, the fattening of cattle, and the rearing of young stock—all the branches of husbandry—are connected together, are explained in theory, and improved in practice, by the same easily intelligible principles.

For the sake of clearness, we have hitherto dwelt solely upon the inorganic or incombustible part of soils, plants, and animals; let us now turn for a little to their organic part.

1. In the dry soil, the organic part forms from two to ten per cent. of the whole weight. It consists, as we have already stated, of the decaying fragments of animals and vegetables; and among the other uses which it serves, is that of supplying the plant with a portion of those substances out of which its organic part is built up. Of the way in which it performs this function, we do not at present speak.

2. In the dry plant, the organic part forms from 90 to 98 per cent. of the whole. As regards its quantity, therefore, it is of much more importance than the inorganic part; at all events, it is necessary to consider its nature, and the purposes it is intended to serve.

a. If we take a quantity of saw dust, or chopped straw, or chaff, or bran, and boil it first in water, and afterwards successively in vinegar, spirit of wine, and ether, each of these liquids will dissolve something out of it; but by far the largest portion will remain undissolved. This white insoluble matter forms the substance of the cells and vessels of plants, and is known by the name of *woody fibre*. It is of great importance to the plant, and forms a large portion of its substance; but except in its very young state, is, for the most part, indigestible in the stomach of animals; and after being eaten, is principally rejected again in the excretions.

b. If wheaten flour be made into a dough, and if this dough be washed upon a sieve under a small stream of water, as long as the water passes through milky, a grey matter, resembling bird lime, will remain on the sieve, while the milky water will gradually deposit a white powder. This white powder is *starch;* the grey substance left in the sieve is *gluten.*

* Johnston's *Elements*, p. 272.

c. If the clear liquor from which the starch has subsided be brought to a boil on the fire, white curdy flocks will separate and fall to the bottom. From its close resemblance to boiled white of egg—the albumen of chemists—this white matter has been called *vegetable albumen*.

d. If, after the separation of these flocks, the water be evaporated to dryness, a little sugar and gum will remain behind; while if the gluten, obtained as above described, be boiled in ether, a portion of fatty oil will be extracted.

e. If oatmeal or beanmeal be intimately mixed with water, and then allowed to stand till the starch settles to the bottom, the addition of vinegar to the clear liquid will throw down a curd, having much resemblance, in properties and composition, to the curd of milk. As its composition has not as yet been exactly made out, the provisional names of *avenine* and *legumin* are given to the substances thus obtained from the oat and the bean respectively. They serve the same purpose in these seeds as the gluten does in the grain of wheat.

Thus the organic part of plants consists essentially of four classes of substances,—

The cellular substance or woody fibre,
Starch, gum, and sugar,
Gluten, albumen, avenine, legumin,
Oil, or fat.

The first of these is composed of carbon (pure charcoal) and water only, and forms from a fourth to a half by weight of all our cultivated crops in their dry state. The starch group consists also of carbon and water only, though in different proportions. It forms from one-half to three-fourths of the weight of all the kinds of vegetable food on which we usually live. The gluten group is distinguished by containing about fifteen per cent. of nitrogen, with a small proportion of sulphur or phosphorus, or both. In wheat it forms about one-tenth, in oatmeal nearly a fifth, and in beans often as much as a fourth of the whole weight. The fats contain no nitrogen, and, in our cultivated grains, vary from one per cent. to ten per cent. of the whole; in our oily seeds they sometimes amount to one-fourth of their weight.

The animal eats all these substances mixed together, in its vegetable food; it lives upon, and is nourished by them. What purposes do they respectively serve in the animal economy? To understand this, we must first study the composition of the organic part of the body itself.

The soft parts of the body, indeed the entire combustible part, consists essentially of three substances, or, more correctly, of three groups of analogous substances.

a. The *cellular substance*, which pervades and forms the outline of the whole body. When the skins of animals are boiled, a jelly is obtained, to which the name of glue is usually given; by chemists it is called *gelatine*. When the cartilages of young bones are boiled, they also yield a jelly, differing in some degree from the former, and to which the name of *chondrin* is given. In a solid state, these compounds form the substance of the cells and vessels of the animal body.

b. The *muscular fibre*, which forms the fleshy parts of the body. If a piece of fresh lean mutton or beef be washed for a length of time in a stream of water, the blood will be removed, and a white fibrous substance will remain, which is the pure fibre of the muscle, more or less mixed with fat. The white of the egg, (albumen,) and the pure curd of milk, called by chemists *casein*, are analogous to muscular fibre. They are all analogous, also, to the gluten and legumin of wheat and other grains, and, like them, contain fifteen per cent. of nitrogen, and a little sulphur or phosphorus, or both.

c. The *fat*, which, in an animal in good condition, forms nearly one-third of the weight of the soft parts of the body. It is very analogous—in some cases absolutely identical—with the fatty matter of the vegetable food.

It will be useful now to compare together the constitution of the *organic* parts of the animal and the vegetable respectively.

The plant contains—	The animal contains—
1. Cellular substance, or woody fibre.	1. Cellular substances. Gelatine, chondrin.
2. Gluten, albumen, &c.	2. Fibrin, albumen, &c.
3. Fatty matters.	3. Fatty matter.
4. Starch, gum, sugar.	

This comparison shows us, that in both animals and vegetables there is a cellular substance performing analogous functions in each, though of unlike composition—that in both there are substances, gluten and fibrin, which are almost identical; the fats, which are often absolutely identical—and that the only marked difference beween them consists in the large quantity of starch, &c., which is present in vegetable food. We can now understand what are the functions which the plant has to perform in reference to animal life, and what purposes are served by the several

constituents of the vegetable food which we eat.

Thus as to the duty of the plant, we formerly saw, that one of its purposes was to draw from the soil those mineral, saline, or inorganic substances which are necessary to form the harder parts of the animal body. This work is done by the roots. We now see that it has besides to manufacture the materials—the gluten and fat—out of which the soft parts of the animal are to be built up. This is done in the interior of its root, stem, and leaves.

Then as to the purposes of the several constituents of the food—the gluten is carried into the stomach, and thence by the proper vessel to build up almost unchanged the muscular parts of the body. The fat also is merely transferred from the stomach to the parts of the system where its presence is required, or where it is to be laid up in store. The plant is thus the brickmaker and hodman, as it were, while the animal is the bricklayer, who selects the materials brought ready to his hand, dresses them a little, if necessary, with his trowel, and fits them into their places.

Here, again, we see the beautiful adaptation of the plant to the animal—a distinct forethought, in obedience to which the plant prepares beforehand what the future animal is to require. The stomach of the animal is not fitted to manufacture the materials of its own body out of the raw elements which exist in the atmosphere and the soil. This labor, therefore, is imposed upon an inferior race of living things; but if this inferior race from any cause, cease to labor, the animal must cease to live. The life of man has been likened to a flower; but the humblest flower has, in reality, a more independent existence than he.

The analogy—the almost absolute identity—above shown to exist between the several parts of the plant and those of the animal, and the way in which the substance of the one is directly converted into the substance of the other, shows how unfounded is that prejudice which many entertain, that a difference exists between animal and vegetable food so essential, that the former is wholly unfit to feed and support the herbivorous races. The starch contained in vegetable food does constitute an important distinction between the two, and one which is connected, as we shall presently see, with very beautiful and important purposes in the animal economy; but there are few animals, indeed, which may not be kept alive upon animal food; still fewer the diet of which might not occasionally be improved by a judicious admixture of substances of animal origin.*

The gluten of the plant and the muscular fibre of the animal are almost identical, and yet they are chemically different. It may be interesting to convey to the reader a general idea of the nature of the agreement and of the minute differences which prevail between these and the other substances we have classed along with them.

We are indebted to Professor Mulder of Utrecht for the observation, that if gluten, albumen, casein, fibrin, &c, be dissolved in caustic potash, and an acid be then added to the solution, a white matter is separated, which from every one of these substances is the same—which exists in and forms from 95 to 99 per cent. of them all—and to which he has given the name of *protein*.† In fact, these substances are all compounds of protein, with minute proportions of sulphur and phosphorus, which in many cases have not hitherto been determined. It is upon these minute proportions of sulphur and phosphorus that the differences observed among these several substances as they exist in the animal and the vegetable in a considerable degree depend. The following table exhibits a simple view of the mutual relations of some of these compounds:—

	Protein.	Sulphur.	Phosphorus.
Glutin‡ of wheat consists of	10 with	2	—
Fibrin of the muscles and blood,	10 —	1 and	1
Albumen of the blood,	10 —	2 —	1
Casein or curd of milk,	10 —	2 —	—
Hair and *Wool*, . .	12 —	24 —	2

This fundamental substance, protein, therefore, exists in a great number of those compounds of which the parts of our bodies consist. It is manufactured by the vegetable out of the elements or more elementary compounds of which it consists—exists,

* On his visit to the stud of the Pasha of Egypt, Colonel E. Napier says,—"Amongst other things, I happened to mention the Indian system of fattening horses on chopped sheep's heads, and was not a little surprised when he said that he could the more readily credit it, as to his personal knowledge the Arabs of the Hedjaz often feed their horses on dried flesh of the camel, as well as its milk, and that in some of the districts along the coast, when barley was scarce, even dried fish was used for them as an article of food."—*Wild Sports in Africa*, &c., ii., p. 206.

† In chemical language, this protein is represented by C^{40}, H^{3}, N^{5}, O^{12}.

‡ Glu*tin* is that part of the Glu*ten* which is soluble in alcohol.

therefore, in the vegetable food we eat—and through the stomach is conveyed to the several parts of our bodies. In the stomach it may be altered, combined with more or less sulphur or phosphorus, but cannot be formed from its elements. Thus we see a little farther into the kind of duty which is imposed upon plants, and into the kind of dependence in which the animal is kept upon the labors of the vegetable kingdom.

But even in the plant, while it is preparing for the animal, this protein serves important purposes. It is produced from the food of the plant in the first root that is formed. It is carried up and deposited along with the young wood. It is necessary in some way to the production of every cell. It is first laid down in the solid state along the walls of the young cells and vessels—it chalks them out as it were. It is afterwards redissolved and shifted in the interior of the plant, probably to form new parts—old cells containing less of it, and young cells more—till at last it is allowed to accumulate in the seeds, from which man and other animals obtain it. Thus there is a unity of purpose and design throughout all the phenomena of life; and while on the way, as it were, to fulfil some great end, many minor purposes are served by every particle of living matter.

There are three substances in the above table, a moment's attention to which will give us an idea of the kind of changes also which take place within the animal body itself. These are the albumen of the blood, the fibrin, and the hair. It is one of the functions of the blood to repair and rebuild the fibre of the muscles. Suppose the albumen of the blood to be changed into fibrin, it only loses one equivalent of sulphur. Thus—

	Protein.	Sulphur.	Phosphorus.
From one of albumen,	10	2	1
Take one of fibrin,	10	1	1
There remains of sulphur,	"	1	"

What becomes of this sulphur? It is partly, at least, expended in the production of hair or wool, in which the proportion of both sulphur and phosphorus is large. This hair is daily growing, and requires to be daily supplied with new materials.

Such researches as the above are not curious merely, or physiologically interesting; they have important bearings also on practical life. Thus the wool and hair to which we have just alluded, as containing so much sulphur, necessarily draws upon and robs the land of this its special constituent. We are informed by Professor Johnston, in his *Elements*, p. 273, that the wool which is grown in Great Britain and Ireland carries off the land every year upwards of four millions of pounds of sulphur, to supply which would require the addition to the soil of 300,000 tons of gypsum. Things that appear trifling to us when viewed in the small way in which we actually see them, become important when considered on the large scale in which they take place in nature. The hair on the heads of our population carries off nearly half as much as the wool of our sheep: it is not without reason, therefore, that the Chinese collect, and employ as a manure, the hair shaven every ten days from the heads of their people.

We cannot advert to the numerous other practical deductions and applications which flow from what has been stated above—how the kind of soil, the mode of culture, the condition of the land as to drainage, &c., modify the proportions of gluten, starch, and fatty matter in the crop—and how the proportion of these, again, in the food, determines, in a great degree, the rapidity with which, other things being equal, the animal we feed lays on muscle or fat.

It is interesting, however, to observe, how still higher practical questions arise out of such investigations. In feeding stock for the growth of beef or mutton, or in keeping dairy cows for the production of milk and cheese, the husbandman is really a manufacturer. He raises certain raw materials in the form of grass, clover, and turnips, and he must convert them into beef and mutton, or into butter and cheese, before he can take them to market. To the practical man, who has a rent to pay, the primary question is, In which of these ways can I turn my raw material to the best account? If the balance of profit, in his locality, is on the side of beef and mutton, he feeds cattle and sheep; if on the side of the milk, he makes butter and cheese.

But the country at large puts the question in another form. When the population is constantly ahead of the productive powers of the land, the primary question becomes, "In which of these states—of beef or milk—can the largest quantity of human food be manufactured from the same quantity of turnips, grass, or clover?" Professor Johnston has stated the amount of our *present knowledge* to be, *that the same herbage will*

produce about five times as much human food in the form of milk as in the form of beef; and adds—"Should the population of this country ever become so dense as to render a rigorous economy of food a national question, butcher meat, if the above data deserve any reliance, will be almost banished from our tables, and a milk diet will be the daily sustenance of nearly all classes of society." *Elements*, p. 279. This result is very curious, and there is an unexpected interest in finding chemical research thus connecting itself with the highest and most important considerations of our national economy.

There remains one other important topic to which it is necessary to advert, in order, in some measure, to complete our sketch of the relations of chemistry to rural economy. We have already seen that the organic part of the plant contains much starch or sugar, while that of the animal contains none. What is the reason of this difference? We eat starch and sugar in our food, and yet they form no part of our bodies. They are not, like the gluten and the fat, built into our substance. What becomes of them, therefore? What purpose do they serve in the animal economy? Why do they exist so largely in all vegetable substances? These inquiries lead us to the discovery of other beautiful contrivances and other wise ends.

Plants draw their organic food—that food from which their organic part is formed—in part from the soil, and in part from the air. Of that which they draw from the air, the carbonic acid* is the most important. This carbonic acid consists of carbon (pure charcoal) and oxygen only. It exists in the atmosphere in exceedingly small quantity, five thousand gallons of air containing only two gallons of this gas.

During the day, all the green parts of our cultivated plants are continually sucking in this gas from the air, and giving off oxygen, adding, in fact, to the proportion of carbon they contain.

We are surprised at first to learn that upwards of three-fourths of the bulk of vast forests, as well as of the crops we reap from our fields, are in this way drawn from the air. We are astonished that the growing plant should be able, by all its diligence in working, to draw in enough of this sparingly diffused carbonic acid to form so large a proportion of its own substance. We are also tempted to ask, why, if plants depend so much upon it, so small a quantity of this gas is diffused through the air? The answer and explanation of all, however, is simple. Animals live in this air as well as plants. It must therefore be adapted to the nature of both. But if the carbonic acid had been present in much larger quantity, it would have been injurious to animal life. To compensate, however, for this smallness of quantity in adaptation to animal life, the plant is made to shoot up a long stem, to thrust out long branches, and to suspend thousands of broad leaves in the midst of the ever-moving air, and thus, by millions of mouths at once, to drink in the minute particles of aerial sustenance, which together are to build up the substance of its growing parts. Thus the balance is kept up, while wisdom and beauty and prevision appear in the way in which it is effected.

The carbon thus drawn from the air unites with the water in the interior of the leaf or stem, and is changed into starch, or sugar, or woody fibre, all of which, as we have already seen, consists of carbon and water only. In this way, the starch we eat in our food is formed out of carbonic acid, drawn from the air by the leaves, and of water drawn from the soil by the roots. But what becomes of the starch after it has been eaten? What purpose does it serve in the animal economy?

Among the necessary functions of animal life is that of breathing. We breathe that we may live. During respiration, we draw into our lungs atmospheric air, containing, as we have seen, a very minute proportion of carbonic acid gas. But when we return the air to the atmosphere from our lungs, it contains a much larger proportion of this gas. It is constantly produced in the blood, and given off from the surface of the lungs into the air. A full grown man throws off as much carbonic acid every day as contains eight or ten ounces of carbon; a cow or a horse about five times as much. This carbon the animal derives in great part from the starch or sugar which it eats, and thus the purpose or function of all the parts of the food is explained. The gluten repairs the waste of the muscles, the oil lays on fat, the saline matters yield their necessary ingredients to the bones and the blood, and the starch feeds the respiration.

The carbonic acid, it thus appears, is sucked out of the air by the plant, and its

* Carbonic acid is the kind of air which escapes from soda water, ginger beer, or champagne, and causes them to effervesce.

carbon combined with water into the new form of starch. The animal eats this starch, and after a while throws the carbon off again into the air in its old form of carbonic acid, ready to be taken up a second time by other plants, and to be reconverted into starch.

This is no doubt a very beautiful little cycle of operations, by which a comparatively small quantity of carbon is made to perform a large amount of work; but if it be true to nature, the carbon must serve some useful purpose, while it is undergoing these successive transformations. The alternate production of starch and carbonic acid must have some connection with the well being of vegetable and animal existences. We shall for the present, pass over its use to the plant, and consider only the purpose it serves in reference to animal life.

When starch or sugar is kindled in the air, it burns; its carbon combines with the oxygen of the atmosphere, and forms carbonic acid. Much heat is given off, and the starch entirely disappears in the form of carbonic acid and water.

A similar change takes place in the body of the animal. The starch which is conveyed into the stomach is burned indirectly, by means of the oxygen which is taken in by the lungs. Heat is thus produced, while carbonic acid and watery vapors are given off in the breath.

In our atmosphere, all sensibly warm substances have a tendency to become cooler. The bodies of warm-blooded animals are thus constantly losing heat. Were there no source of heat within the living body itself, therefore, it would soon become cold and stiff as those of dead animals so quickly do. The burning of the food in the system—for so it may be called—is this source of heat; hence the coldness and the shivering of the half-fed, and the cheerful warmth of those who live well; hence also the larger consumption of food where much exercise is taken and much warmth expended, and the smaller appetite of those whose lives are sedentary, or who live in comfortable houses.

Thus the purpose of the starch is to keep up the heat of the living animal. This purpose attained, its duty is performed. It is necessary to the working of the animal machine, that its temperature should be kept up to a certain point. To effect this an additional movement, as it were, is attached to it, by means of which starch is manufactured into carbonic acid and water, which escape while a supply of heat is left behind, by which the other motions of the machine are kept alive.

Nor are these explanations simple and beautiful only. The practical man learns from them that his stock ought to have a certain quantity of starch in their food, but that they can by no means live on starch alone. We say ought, because economy prescribes it. Animals will live—herbivorous animals that is—though there be no starch or sugar in their food. Fat may supply its place, or even beef and gluten in certain circumstances. But in our climate these are neither suited to the habits of our stock, nor are they economical to the feeder. The use of beef or gluten, indeed, in the place of starch, involves an absolute loss of most valuable nourishment.

But the animal dies. The body is consigned to the dust. Its organic and inorganic parts there undergo numerous chemical changes, all of which are intended to adapt the dead matter for entering into the walls of new superstructures. To follow these changes would show us further beautiful contrivances and happy adjustments—connected also with reflections as high, with practical results as important, and with practical suggestions as useful as any of those we have already considered.

We must, however, hold our pen; we have given instances enough to show how rich in instruction this whole subject is—how full of instruction especially to the improving agriculturist. How important, therefore, in the present state of our national agriculture, that these enlarged means of good which the Deity offers us, should be placed within the reach of our practical men, and that these men should be induced to employ them with a view to their individual as well as to the general welfare.

Had our limits permitted us, we could have wished now to advert to the origin and progress of this knowledge,—to have inquired how, when, and by whom these applications of science to agriculture have been successively made. We should have liked to explain how Lord Dundonald first drew together the scattered fragments of such knowledge in our own country—how Davy built upon and added much to this foundation—how De Saussure, meanwhile, was enlarging by important facts and deductions our knowledge of the chemical physiology of plants—how, following in the footsteps of these men, Sprengel almost alone during a lapse of twenty years, grad-

ually developed and extended all previous views, and especially systematized the doctrine of Rückert, in regard to the ash of plants and the constitution of soils—and how in our day the works of Mulder in Holland, of Liebig in Germany, of Dumas and Boussingault in France, and of Johnston at home, are everywhere diffusing this knowledge—and by later discoveries and researches widening and correcting it.

But our space forbids us to enter upon this topic. Neither can we spare a single paragraph to those important and warmly conducted controversies,* which still divide chemists and physiologists in regard to some of the principles we have attempted to popularize in the present article. One reflection, however, occurs to us which is not unworthy the attention of these opposing parties. Chemistry is an eminently progressive science. The new knowledge of last year has already become old, and has been succeeded by further acquisitions and experimental results. Facts, as they are successively discovered and confirmed, become parts of our positive and permanent knowledge. They are, therefore, recorded and remembered, while the names of their discoverers are first omitted and then forgotten. Few men are fortunate enough to throw so sudden and broad a gleam across the dark parts of nature, as necessarily to connect their names with the history of natural science. The mass, even of zealous investigators, must be content to die and be forgotten. Their reward is to be found in the respect of their contemporaries among whom they have lived and labored for the common good—and without this respect and sympathy, how small the comparative comfort we can derive from the thought that future times may be better to our *names* than the present has been to *ourselves!*

But why should any one wish to deprive his fellow-laborer of his present reward? Berzelius and Mitscherlich, Liebig and Dumas, Boussingault and Sprengel, have each in their own walks labored long for the extension of human knowledge; why not permit each while he lives to enjoy the respect he has merited? Why should any one chemist—undervaluing all others—attempt to monopolize to himself the entire respect of all? In the public esteem there is space enough for all good men. The respect given to Berzelius, or Sprengel, or Johnston, is not deducted from that which is due to Liebig or Dumas. All will die alike, and in a few years, more or less, the reputation of each will scarcely even be a matter of history. Why should the harmony and peace of life be sacrificed for any thing so ephemeral?

Of the men of our time, who will ever attain the living eminence of Paracelsus—of their writings, which can hope to survive a tithe of the time of those of Avicenna? And yet in what estimation do we now hold either these men or their works? Is it worth a good man's while to heave a single sigh for all the fame they now enjoy? Present happiness is above all fame—and he will both be happiest himself, and will least interfere with the happiness of others, who while he commends himself to the public esteem, by laboring for the common good, is ready to allow their due share of merit to others also, who devote their time and talents to the same end

In conclusion, if this new knowledge be so very important to agriculture—how important is it also that it should be diffused among the agricultural classes—that what is so likely to benefit all should be brought within the reach, and, if possible, be made the property of all! How important, likewise, that encouragement should be given for the further development of this kind of knowledge—for clearing up many dark and misty spots which still present themselves, and for cultivating with assiduity those new fields of research which are daily opening up in connection with scientific agriculture.

The agricultural community, especially in the north of our island, appear to be in some degree alive to all this. Their de-

* The reader who wishes to study the controversy in regard to Liebig's peculiar views, may have recourse to the following among other pamphlets. We have not adverted to any of these views in the text, because we wished to avoid all occasion of controversy.

1. *Beleuchtung der Organischen Chemie des Herrn Doctor J. Liebig*, &c. Von Dr. F. X. Hlubek. Grütz, 1842.
2. *Ueber, Liebig's Theorie der Pflanzenernähr ung.* Cassel, 1842.
3. *Offenes Sendschreiben an Herrn Dr. Justus Liebig.* Von M. J. Schleiden, &c. Leipzig, 1842.
4. *Dr. Justus Liebig's Verhältniss zur Pflanzenphysiologie.* Von Dr. Hugo Mohl. Tübingen, 1843.

It is to be regretted that one so talented as Liebig, and so deservedly eminent as an organic chemist, should have done so little justice either to himself or to others, when he ventured upon the field of physiology.

sire for knowledge is proved by the number of small periodicals exclusively devoted to agricultural subjects, which have lately arisen in different parts of Scotland, and by the kind of matter with which these periodicals are filled. The *Committee for Agricultural Education*, formed a year ago for the purpose of promoting the introduction of agricultural education into *all* our elementary schools, in the rural districts, has already effected much, and we hope will speedily see its object fully attained. But the boldest and most successful movement in behalf of Scottish agriculture in our day, has been the establishment of the *Agricultural Chemistry Association of Scotland.* In founding this institution, tenants and proprietors have both concurred. Indeed, we believe it originated with the tenantry themselves—a circumstance at once honorable to Scottish farmers, and illustrative of the amount of knowledge they already possessed. For a man must already know a good deal not only of the general nature, but of the special bearings of chemical science, before he can understand how it can be made of actual pecuniary value to the practical farmer. The objects of this Association are to diffuse knowledge by lectures and otherwise among the agricultural body—to protect the farmer by means of chemical analyses from the frauds of the dealers and manufacturers of manure—to guide his practice and use of manures by the analysis of soils, limestones, and vegetable products—and to make original researches with the view of enlarging our actual knowledge. These objects are worthy of the character of the Scottish agricultural body, and are in accordance with the requirements of our time. The example set by Scotland has already been imitated in other countries. We heartily wish success, therefore, to this new institution, and we trust it will meet with that support which the national importance of its objects deserves.

METEOROLOGY.—Throughout France, as in various parts of England, severe storms have raged within the last fortnight, and heavy floods and much destruction have been the consequence. Among the curious effects, we may notice, that a lightning flash from *heaven* struck a small church in the street called "*d'Enfer.*"—*Lit. Gaz.*

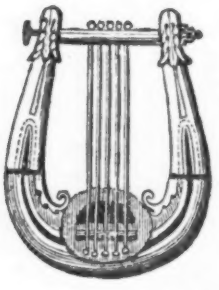
EL DORADO.—No popular illusion ever occasioned such a waste of human life as the expeditions in search of El Dorado. The name of our chivalric and unfortunate Raleigh is closely connected with it; and as the locality of the fable was shifted to Guiana, he either undertook himself or caused four expeditions to be undertaken, which had for their object to achieve the discovery of the capital of El Dorado, called Manoa, and paid the failure with his life. After generations of fable, Humboldt, partly by personal investigation, partly by deep reasoning, proved that such an inland lake could not exist. Nevertheless, a Mr. Van Heuvel has lately attempted to restore it, and a map of Guiana which accompanies his work on El Dorado exhibits again the Laguna de Parima. Sir R. Schomburgk demonstrated from his map (which covers a hundred square feet, and which was constructed upon his astronomical observations during his exploring tours in Guiana from 1835 to 1843) that such a lake could not exist, and that M. de Humboldt, with his general sagacity, had likewise in this regard arrived at correct conclusions. He dwelt afterwards upon some of the most striking points in the geography of Guiana, referred to its fertility, and regretted that he did not consider the climate favorable to a European constitution; and he wished that it should go forth as his opinion that an inhabitant from the northern parts of Europe was not able to labor in the open air under the tropics. His assertion is borne out by all attempts which have been made hitherto to settle European laborers in Guiana, St. Lucia, Guatamala, Jamaica, &c.

Guiana, comprising the possessions of Great Britain and the other European powers, contains 690,000 square miles, and is bounded by the Amazon and the Orinoco. By means of that remarkable canal, the Casiquiare, which connects the Orinoco with the Rio Negro and the Amazon, it may be circumnavigated. With the assistance of short portages over land, starting in a canoe from Demerara, the mouth of the Rio Plata, Cuzco, Lima, Santa Fé de Bogota, may be reached by inland navigation. The highest mountains in Guiana are, the Maravacca, which is about 11,000 feet, and Roraima, about 8000 feet above the sea. The largest river in British Guiana is the Essequibo; its length is computed at 650 miles, and it drains an area of 42,800 square miles.—*Lit. Gaz.*

LUTHER.—At Stockholm has been discovered Luther's original letter to the Archbishop of Magdeburgh, protesting against the sale of indulgences; it bears the date of Oct. 31st, 1547—*Lit. Gaz.*

POTATO PAPER.—A manufacturer of Vire, after six years' labor, has succeeded in producing excellent paper and pasteboard from a substance separated from the potato.—*Lit. Gaz.*

FRENCH SCIENTIFIC EXPEDITION.—The gunbrig Boulonnaise has arrived at Brest, after an absence of above three years, during which period, she has made a hydrographic survey of immense extent within the tropics, including more than 250 leagues of the river Amazon and its principal tributaries.—*Lit. Gaz.*



FROM MILMAN'S JERUSALEM.

See Plate.

TITUS.

Advance the eagles, Caius Placidus,
Even to the walls of this rebellious city!
What! shall our bird of conquest, that hath flown
Over the world, and built her nest of glory
High in the palace-tops of proudest kings,
What! shall she check and pause here in her circle,
Her centre of dominion? By the gods,
It is a treason to all-conquering Rome,
That thus our baffled legions stand at bay
Before this hemm'd and famishing Jerusalem.
It must be—
And yet it moves me, Romans! it confounds
The counsels of my firm philosophy,
That Ruin's merciless ploughshare must pass o'er,
And barren salt be sown on yon proud city.
As on our olive-crowned hill we stand,
Where Kedron at our feet its scanty waters
Distils from stone to stone with gentle motion,
As through a valley sacred to sweet peace,
How boldly doth it front us! how majestically!
Like a luxurious vineyard, the hill-side
Is hung with marble fabrics, line o'er line,
Terrace o'er terrace, nearer still, and nearer
To the blue heavens. Here bright and sumptuous palaces,
With cool and verdant gardens interspers'd;
Here towers of war that frown in massy strength,
While over all hangs the rich purple eve,
As conscious of its being her last farewell
Of light and glory to that fated city.
And, as our clouds of battle dust and smoke
Are melted into air, behold the Temple,
In undisturb'd and lone serenity,
Finding itself a solemn sanctuary
In the profound of heaven! It stands before us
A mount of snow, fretted with golden pinnacles!
The very sun, as though he worshipp'd there,
Lingers upon the gilded cedar roofs;
And down the long and branching porticoes,
On every flowery-sculptured capital,
Glitters the homage of his parting beams.
By Hercules! the sight might almost win
The offended majesty of Rome to mercy.
Yon lofty city, and yon gorgeous Temple,
Are consecrate to ruin. Earth is weary
Of the wild factions of this jealous people,
And they must feel our wrath, the wrath of Rome,
Even so that the rapt stranger shall admire
Where that proud city stood, which was Jerusalem.
Now, Mercy, to the winds! I cast thee off—
My soul's forbidden luxury, I abjure thee!
Thou much-abused attribute of gods
And godlike men. 'Twas nature's final struggle;
And now, whate'er thou art, thou unseen prompter!
That in the secret chambers of my soul
Darkly abidest, and hast still rebuked
The soft compunctious weakness of mine heart,
I here surrender thee myself Now wield me
Thine instrument of havoc and of horror,
Thine to the extremest limits of revenge;
Till not a single stone of yon proud city
Remain; and even the vestiges of ruin
Be utterly blotted from the face of earth!

JAVAN.

I feel it now, the sad, the coming hour;
The signs are full, and never shall the sun
Shine on the cedar roofs of Salem more;
Her tale of splendor now is told and done;
Her wine-cup of festivity is spilt,
And all is o'er, her grandeur and her guilt.

MIRIAM.

Ah me! how strange!
This moment, and the hurrying streets were full
As at a festival; now all's so silent
That I might hear the footsteps of a child.
The sound of dissolute mirth hath ceased, the lamps
Are spent, the voice of music broken off.
No watchman's tread comes from the silent wall,
There are no lights nor voices in the towers.
I do mistake! this is the Wilderness,
The Desert, where winds pass and make no sound,
And not the populous city, the besieged
And overhung with tempest. Why, my voice,
My motion, breaks upon the oppressive stillness
Like a forbidden and disturbing sound.
The very air's asleep, my feeblest breathing
Is audible—I'll think my prayers—and then——
——Ha! 'tis the thunder of the Living God!
It peals! it crashes! it comes down in fire!
Again! it is the engine of the foe,
Our walls are dust before it—Wake—oh wake—
Oh Israel!—Oh Jerusalem, awake!
Why shouldst thou wake? thy foe is in the heavens.
Yea, thy judicial slumber weighs thee down,
And gives thee, oh! lost city, to the Gentile,
Defenceless, unresisting.
Hark! now in impious rivalry
Man thunders. In the centre of our streets
The Gentile trumpet, the triumphant shouts
Of onset; and I—I, a trembling girl,
Alone, awake, abroad.

TO DEATH.

BY MRS. JAMES GRAY.

Conqueror, and friend, and foe!
Thou who hast ruled the world since that dread hour,
When on the earth thy dark and deadly power
Came linked with sin and woe.

Thou who dost crush the rose,
Or fling the tall pine down the mountain path;
Who rid'st the tempest-cloud in fiery wrath,
Or comest like twilight's close!

A thought is thrilling me,
Shadowing my spirit in its summer prime;
Oh! in what place, what season, or what time,
Where shall I meet with thee?

Shall friends stand weeping by,
Shall a soft sleep mine eyelids gently press,
And shall my spirit, calm and terrorless,
Pass in a gentle sigh?

Or shall the anguished sob
And writhing pang my failing brow convulse?
Shall pain and weary torture bid my pulse
In struggling weakness throb?

Or, sadder fate than this,
Shall I lie down in loneliness to die—
No anxious friend, no kind and pitying eye
To see these agonies?

Shall mine own land receive
The wreck of this poor frame, and o'er my tomb
My country's flowers in wild luxuriance bloom,
And her green sod upheave?

Or shall the cloudless sky
Of southern climes look down upon my grave?
Shall the rich orange bloom, or citron wave,
Where at the last I lie?

Or wilt thou come, O Death!
In mantling flames, and in thy wild embrace
Crush me to ashes, that shall have their place
But on the wild wind's breath?

Or in the stormy sea,
Down 'midst the sounding caverns of the deep,
Shall the cold sea-flowers bloom, and watch my sleep—
Where shall I meet with thee?

Shall age have stamped my brow,
And cast its film upon my sunken eye?
Nay—didst thou laugh that moment scornfully?
Death! art thou near me now?

It may be but the thrill
Of natural fear, that this weak spirit dims
To think how soon these sentient moving limbs
An early grave may fill.

Yet come thou when thou may'st,
Thou canst not touch me, save by His command
Who holdeth in the hollow of his hand
The wild sea's tameless waste.

With One thou once did meet,
Who light upon thy darkness did confer.
What art thou now?—a conquered Conqueror—
Thy victory was defeat.

Through Him who died for me,
I fear thee not! I will not dread thy power—
He hath prepared me for the trying hour
Whene'er I meet with thee.

THE BRIDEGROOM TO HIS BRIDE.

Four years ago, dear love!
And we were strangers; in a distant land
Long had it been my lonely lot to rove;
And I had never touched that gentle hand,
Or looked into the lustre of those eyes,
Or heard that voice of lovely melodies,
Winning its way unto the listener's heart,
And gladdening it, as a fresh stream doth part
The grass and flowers, and beautifies its road
With fresher hues, by its sweet tides bestowed.
Then I had never heard that name of thine,
Which on this blessed day hath merged in mine!

Three years ago, mine own,
And we had met—'twas but acquaintanceship;
There was no tremor in the courteous tone
Which, greeting thee, flowed freely to my lip
At each new interview. Thy beauty seemed
Indeed the very vision I had dreamed
Of woman's loveliest form; but that it shrined
So bright a gem, so true and pure a mind,
I did not early learn; for thou art one
Whose gentle, kindly actions ever shun
The glare of day. I knew not *then* the power
That seems thy richest gift at this blest hour.

Another year went by,
And we were *friends!*—"dear friends" we called each other—
We said our bosoms throbbed in sympathy,
That we were like a sister and a brother.
Ah! but do brothers' hearts thrill through each chord,
At a dear sister's smile or gracious word?
Do sisters blush, and strive the blush to hide,
When a fond brother lingers at their side?
Do friends, and nothing more, shrink from surmise,
And dread to meet the keen world's scrutinies,
And tremble with a vague and groundless shame,
And start when each doth hear the other's name?

One little year ago,
And we were lovers—lovers pledged and vowed—
The unsealed fountains of our hearts might flow;
Our summer happiness had scarce a cloud.
We smiled to think upon the dubious past,
How *could* so long our self-delusion last?
We laughed at our own fears, whose dim array
One spoken word of Love had put away.
In love's full blessed confidence we talked,
We heeded not who watched us as we walked;
And day by day hath that affection grown,
Until this happy morn that makes us one.

Beloved! 'tis the day,
The summer day, to which our hearts have turned,
As to a haven that before them lay,
A haven dim and distantly discerned.
Now we have reached it, and our onward gaze
Must henceforth be beyond earth's fleeting days,
Unto a better home, when having loved
One more than e'er each other—having proved
Faithful to Him, and faithful to the vow
That in our hearts is echoing even now,
We two shall dwell His glorious throne before,
With souls, not *bound*, but blended evermore.

MUSIC AND MOONLIGHT.

BY MRS. CRAWFORD.

When moonlight softly slumbers
Upon the breezeless lake,
I love to hear the numbers
Of music round me break;

For then the new-born pleasure
Of life's unclouded morn
Comes back in that sweet measure,
On viewless echoes borne.

Oft as the soft note lingers
Of some remembered song,
It seems as though the fingers,
That had been mute so long,

O'er silver cords were stealing
With all their wonted sway,
To rouse the heart to feeling,
And call the soul away.

Ye brilliant orbs of glory,
Ye countless eyes of night,
That read the wondrous story
Withheld from mortal sight,

Oh! say, do souls departed
Their blissful wings extend
To seek the lonely-hearted—
The once beloved friend?

Methinks the breeze that flutters
The silken leaves of flowers,
In mystic language utters—
"The *friends* of *former* hours."

And she above all other,
My childhood's light and guide,
My own immortal mother,
Like moonlight seems to glide;

E'en as in life she glided
Along the paths I trod—
Mine own, mine undivided—
Till call'd away to God.

And can such *sweet* communion
With life's extinction end?
The soul's mysterious union
Divorce the living friend?

Ah, no! the soul remembers
Earth's dear affections still,
And guards those sleeping embers
That time can never kill.

THE CRY OF THE PEOPLE.

BY CHARLES MACKAY.

Oh, it is bitter-hard to roam the earth,
Aliens to joy, with sad thoughts overflowing,
To hear the young birds carol in their mirth,
To feel the sunshine, and the warm winds blowing,—
To see the beauty in the fields and floods,
The plenty of the meadows, green or golden,
The fair full orchards redolent of buds,
And know that we, by a hard fate withholden,
Must keep our appetites aloof, nor dare
To taste the stores which happier birds may share.

'Tis hard to know that the increase of wealth
Makes us no richer, gives us no reliance;
And that while ease, and luxury, and health
Follow the footsteps of advancing science,
They shower no benefits on us, cast out
From the fair highways of the world, to wander
In dark paths darkly, groping still about,
And at each turn condemn'd to rest, and ponder
If living be the only aim of life—
Mere living, purchased by perpetual strife.

We ask not much. We have no dread of toil;
Too happy we, if labor could provide us,—
Even though we doubled all our sweat and moil,—
Raiment and food, and shelt'ring roofs to hide us
From the damp air and from the winter's cold;—
If we could see our wives contented round us,
And to our arms our little children fold,
Nor fear that next day's hunger should confound us.
With joys like these, and one sweet day of rest,
We would complain no more, but labor, bless'd.

Rich men have kindly urged us to endure,
And they will send us clergymen to bless us;
And lords who play at cricket with the poor,
Think they have cured all evils that oppress us.
And then we think endurance is a crime;
That those who wait for justice never gain it;
And that the multitudes are most sublime
When, rising arm'd, they combat to obtain it;
And dabbling in thick gore, as if 'twere dew,
Seek not alone their rights, but vengeance too.

But these are evil thoughts; for well we know,
From the sad history of all times and places,
That fire, and blood, and social overthrow,
Lead but to harder grinding of our faces
When all is over: so, from strife withdrawn,
We wait in patience through the night of sorrow,
And watch th far-off glimpses of the dawn
That shall assure us of a brighter morrow.
And meanwhile, from the overburden'd sod,
Our cry of anguish rises up to God.

SCIENCE AND ART.

FIFTEENTH MEETING OF THE BRITISH ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE.

AT CAMBRIDGE.—SIR J. HERSCHELL PRESIDING.

SELECTIONS FROM THE REPORT OF THE ATHENÆUM.

In order to give this Report, we omit Bibliographical Notices, and Select List of Recent Publications —Ed.

Lord Rosse's Telescope.—Sir J. Herschell, in his introductory address, thus speaks:—

"The last year must ever be considered an epoch in Astronomy, from its having witnessed the successful completion of the Earl of Rosse's six-feet reflector—an achievement of such magnitude, both in itself as a means of discovery, and in respect of the difficulties to be surmounted in its construction, (difficulties which perhaps few persons here present are better able from experience to appreciate than myself,) that I want words to express my admiration of it. I have not myself been so fortunate as to have witnessed its performance, but from what its noble constructor has himself informed me of its effects on one particular nebula, with whose appearance in powerful telescopes I am familiar, I am prepared for any statement which may be made of its optical capacity. What may be the effect of so enormous a power in adding to our knowledge of our own immediate neighbors in the universe, it is of course impossible to conjecture; but for my own part I cannot help contemplating, as one of the grand fields open for discovery with such an instrumen, those marvellous and mysterious bodies, or systems of bodies, the Nebulæ. By far the major part, probably, at least nine-tenths of the nebulous contents of the heavens consist of nebulæ of spherical or elliptical forms presenting every variety of elongation and central condensation. Of these a great number have been resolved into distinct stars, and a vast multitude more have been found to present that mottled appearance which renders it almost a matter of certainty that an increase of optical power would show them to be similarly composed. A not unnatural or unfair induction would therefore seem to be, that those which resist such resolution do so only in consequence of the smallness and closeness of the stars of which they consist; that, in short, they are only optically and not physically nebulous. There is, however, one circumstance which deserves especial remark, and which, now that my own observation has extended to the nebulæ of both hemispheres, I feel able to announce with confidence as a general law, viz., that the character of easy resolvability into separate and distinct stars, is almost entirely confined to nebulæ deviating but little from the spherical form; while, on the other hand, very elliptic nebulæ, even large and bright ones, offer much greater difficulty in this respect. The cause of this difference must, of course, be conjectural, but, I believe, it is not possible for any one to review *seriatim* the nebulous contents of the heavens without being satisfied of its reality as a physical character. Possibly the limits of the conditions of dynamical stability in a spherical cluster may be compatible with less numerous and comparatively larger individual constituents than in an elliptic one. Be that as it may, though there is no doubt a great number of elliptic nebulæ in which stars have *not* yet been noticed, yet there are so many in which they *have*, and the gradation is so insensible from the most perfectly spherical to the most elongated elliptic form, that the force of the general induction is hardly weakened by this peculiarity; and for my own part I should have little hesitation in admitting all nebulæ of this class to be, in fact, congeries of stars. And this seems to have been my father's opinion of their constitution, with the exception of certain very peculiar looking objects, respecting whose nature all opinion must for the present be suspended. Now, among all the wonders which the heavens present to our contemplation, there is none more astonishing than such

close compacted families or communities of stars, forming systems either insulated from all others, or in binary connection, as double clusters whose confines intermix, and consisting of individual stars nearly equal in apparent magnitude, and crowded together in such multitudes as to defy all attempts to count or even to estimate their numbers. What *are* these mysterious families? Under what dynamical conditions do they subsist? Is it conceivable that they can exist at all, and endure under the Newtonian law of gravitation without perpetual collisions? And, if so, what a problem of unimaginable complexity is presented by such a system, if we should attempt to dive into its perturbations and its conditions of stability by the feeble aid of our analysis. The existence of a luminous matter, not congregated into massive bodies in the nature of stars, but disseminated through vast regions of space in a vaporous or cloud-like state, undergoing, or awaiting the slow process of aggregation into masses by the power of gravitation, was originally suggested to the late Sir W. Herschell in his reviews of the nebulæ, by those extraordinary objects which his researches disclosed, which exhibit no regularity of outline, no systematic gradation of brightness, but of which the wisps and curls of a cirrhus cloud afford a not inapt description. The wildest imagination can conceive nothing more capricious than their forms, which in many instances seem totally devoid of plan, as much so as real clouds—in others offer traces of a regularity hardly less uncouth and characteristic, and which in some cases seems to indicate a cellular, in others a sheeted structure, complicated in folds as if agitated by internal winds.

Should the powers of an instrument such as Lord Rosse's succeed in resolving these also into stars, and, moreover, in demonstrating the starry nature of the regular elliptic nebulæ, which have hitherto resisted such decomposition, the idea of a *nebulous matter*, in the nature of a shining fluid, or condensible gas, must, of course, cease to rest on any support derived from actual observation in the sidereal heavens, whatever countenance it may still receive in the minds of cosmogonists from the tails and atmospheres of comets, and the zodiacal light in our own system. But though all idea of its being ever given to mortal eye, to view aught that can be regarded as an outstanding portion of primæval chaos, be dissipated, it will by no means have been even then demonstrated that among those stars, so confusedly scattered, no aggregating powers are in action, tending to draw them into groups and insulate them from neighboring groups; and, speaking from my own impressions, I should say that, in the structure of the Magellanic clouds, it is really difficult not to believe we see distinct evidences of the exercise of such a power. This part of my father's general views of the construction of the heavens, therefore, being entirely distinct from what has of late been called "the nebulous hypothesis," will still subsist as a matter of rational and philosophical speculation—and perhaps all the better for being separated from the other.

"A great deal of attention has been lately, and I think very wisely, drawn to the philosophy of science and to the principles of logic, as founded, not on arbitrary and pedantic forms, but on a careful inductive inquiry into the grounds of human belief, and the nature and extent of man's intellectual faculties. If we are ever to hope that science will extend its range into the domain of social conduct, and model the course of human actions on that thoughtful and effective adaptation of means to their end, which is its fundamental principle in all its applications (the *means* being here the total devotion of our moral and intellectual powers—the *end*, our own happiness and that of all around us)—if such be the far hopes and long protracted aspirations of science, its philosophy and its logic assume a paramount importance, in proportion to the practical danger of erroneous conceptions in the one, and fallacious tests of the validity of reasoning in the other.

On both these subjects works of first-rate importance have of late illustrated the scientific literature of this country. On the philosophy of science, we have witnessed the production, by the pen of a most distinguished member of this university, of a work so comprehensive in its view, so vivid in its illustrations, and so right-minded in its leading directions, that it seems to me impossible for any man of science, be his particular department of inquiry what it may, to rise from its perusal without feeling himself strengthened and invigorated for his own special pursuit, and placed in a more favorable position for discovery in it than before, as well as more competent to estimate the true philosophical value and import of any new views which may open to him in its prosecution. From the peculiar and *à priori* point of view in which the distinguished author of the work in question has thought proper to place himself before his subject, many may dissent; and I own myself to be of the number;—but from this point of view it is perfectly possible to depart without losing sight of the massive reality of that subject itself; on the contrary, that reality will be all the better seen and understood, and its magnitude felt, when viewed from opposite sides, and under the influence of every accident of light and shadow which peculiar habits of thought may throw over it.

Accordingly, in the other work to which I have made allusion, and which, under the title of a "System of Logic," has for its object to give "*a connected view of the principles of evidence and the methods of scientific investigation*"—its acute and in many respects profound author—taking up an almost diametrically opposite station, and looking to experience as the ultimate foundation of all knowledge—at least, of all scientific knowledge—in its simplest axioms as well as in its most remote results—has presented us with a view of the inductive philosophy, very different indeed in its general aspect—but in which, when carefully examined, most essential features may be recognized as identical, while some are brought out with a salience and effect which could not be attained from the contrary point of sight. It cannot be expected that I should enter into any analysis or comparison of these remarkable works—but it seemed to me impossible to avoid pointedly mentioning them on this occasion, because they certainly, taken together, leave the philosophy of science, and indeed *the principles of all general reasoning*, in a very different state from that in which they found them. Their influence, indeed, and that of some other works of prior date, in which the same general subjects have been more lightly touched upon, has already begun to be felt and responded to from a quarter where, perhaps,

any sympathy in this respect might hardly have been looked for. The philosophical mind of Germany has begun, at length, effectually to awaken from the dreamy trance in which it had been held for the last half century, and in which the jargon of the Absolutists and Ontologists had been received as oracular. An "anti-speculative philosophy" has arisen and found supporters—rejected, indeed, by the Ontologists, but yearly gaining ground in the general mind. It is something so new for an English and a German philosopher to agree in their estimate either of the proper objects of speculation or of the proper mode of pursuing them, that we greet, not without some degree of astonishment, the appearance of works like the Logic and the new Psychology of Beneke, in which this false and delusive philosophy is entirely thrown aside, and appeal at once to the nature of things as we find them, and to the laws of our intellectual and moral nature, as our own consciousness and the history of mankind reveal them to us.*

Meanwhile, the fact is every year becoming more broadly manifest, by the successful application of scientific principles to subjects which had hitherto been only empirically treated, (of which agriculture may be taken as perhaps the most conspicuous instance,) that the great work of Bacon was not the completion, but, as he himself foresaw and foretold, only the commencement of his own philosophy; and that we are even yet only at the threshold of that palace of truth which succeeding generations will range over as their own—a world of scientific inquiry, in which not matter only and its properties, but the far more rich and complex relations of life and thought, of passion and motive, interest and actions, will come to be regarded as its legitimate objects. Nor let us fear that in so regarding them we run the smallest danger of collision with any of those great principles which we regard, and rightly regard, as sacred from question. A faithful and undoubting spirit carried into the inquiry, will secure us from such dangers, and guide us, like an instinct, in our paths through that vast and enlarged region, which intervenes between those ultimate principles and their extreme practical applications. It is only by working our way *upwards towards* those principles as well as *downwards from them*, that we can ever hope to penetrate such intricacies, and thread their maze; and it would be worse then folly—it would be treason against all our highest feelings—to doubt that to those who spread themselves over these opposite lines, each moving in his own direction, a thousand points of meeting and mutual and joyful recognition will occur.

But if science be really destined to expand its scope, and embrace objects beyond the range of merely material relation, it must not altogether and obstinately refuse, even within the limits of such relations, to admit conceptions which at first sight may seem to trench upon the immaterial, such as we have been accustomed to regard it. The time seems to be approaching when a merely mechanical view of nature will become impossible—when the notion of accounting for *all* the phenomena of nature, and even of mere physics, by simple attractions and repulsions fixedly and unchangeably inherent in material centres, (granting any conceivable system of Boscovichian alternations,) will be deemed untenable. Already we have introduced the idea of *heat-atmospheres* about particles to vary their repulsive forces according to definite laws. But surely this can only be regarded as one of those provisional and temporary conceptions which, though it may be useful as helping us to laws, and as suggesting experiments, we must be prepared to resign if ever such ideas, for instance, as radiant stimulus or conducted influence should lose their present vagueness, and come to receive some distinct scientific interpretation. It is one thing, however, to suggest that our present language and conceptions should be held as provisional—another to recommend a general unsettling of all received ideas. Whatever innovations of this kind may arise, they can only be introduced slowly, and on a full sense of their necessity; for the limited faculties of our nature will bear but little of this sort at a time without a kind of intoxication, which precludes all rectilinear progress—or, rather, all progress whatever, except in a direction which terminates in the wildest vagaries of mysticism and clairvoyance.

But, without going into any subtleties, I may be allowed to suggest that it is at least high time that Philosophers, both physical and others, should come to some nearer agreement than appears to prevail as to the meaning they intend to convey in speaking of causes and causation. On the one hand we are told that the grand object of physical inquiry is to explain the phenomena of nature, by referring them to their causes; on the other, that the inquiry into causes is altogether vain and futile, and that science has no concern, but with the discovery of *laws*. Which of these is the truth? Or are both views of the matter true on a different interpretation of the terms? Whichever view we may take, or whichever interpretation adopt, there is one thing certain—the extreme inconvenience of such a state of language. This can only be reformed by a careful analysis of this widest of all human generalizations, disentangling from one another the innumerable shades of meaning which have got confounded together in its progress, and establishing among them a rational classification and nomenclature. Until this is done we cannot be sure that by the relation of cause and effect one and the same kind of relation is understood. Indeed, using the words as we do, we are quite sure that the contrary is often the case; and so long as uncertainty in this respect is suffered to prevail, so long will this unseemly contradiction subsist, and not only prejudice the cause of science in the eyes of mankind, but create disunion of feeling, and even give rise to accusations and recriminations on the score of principle among its cultivators.

The evil I complain of becomes yet more grievous when the idea of *law* is brought so prominently forward as not merely to throw into the background that of *cause*, but almost to thrust it out of view altogether; and if not to assume something approaching to the character of direct agency, at least to place itself in the position of a substitute for what mankind in general understand by *explanation:* as when we are told, for example, that the successive appearance of races of organized beings on earth, and their disappearance, to give place to others, which geology teaches us—is a result of some certain law of development, in vir-

* *Vide* Beneke, Neue Psychologie, s. 300 et seq., for an admirable view of the state of metaphysical and logical philosophy in England.

tue of which an unbroken chain of gradually exalted organization from the crystal to the globule, and thence, through the successive stages of the polypus, the mollusc, the insect, the fish, the reptile, the bird, and the beast, up to the monkey and the man (nay, for ought we know, even to the angel,) has been (or remains to be) evolved. Surely, when we hear such a theory, the natural, human craving after *causes*, capable in some conceivable way of giving rise to such changes and transformations of organ and intellect—*causes why* the development at different parts of its progress should divaricate into different lines—*causes*, at all events, intermediate between the steps of the development—becomes importunate. And when nothing is offered to satisfy this craving, but loose and vague references to *favorable circumstances* of climate, food, and general situation, which no experience has ever shown to convert one species into another; who is there that does not at once perceive that such a theory is in no respect more *explanatory*, than that would be which simply asserted a miraculous intervention, at every successive step of that unknown series of events, by which the earth has been alternately peopled and dispeopled of its denizens?

A *law* may be a *rule* of action, but it is not *action*. The Great First Agent may lay down a rule of action for himself, and that rule may become known to man by observation of its uniformity: but constituted as our minds are, and having that conscious knowledge of causation, which is forced upon us by the reality of the distinction between *intending* a thing, and *doing* it, we can never substitute the *rule* for the *act*. Either directly, or through delegated agency, whatever takes place is not merely *willed*, but *done*, and what is done we then only declare to be explained, when we can trace a process, and show that it consists of steps analogous to those we observe in occurrences which have passed often enough before our own eyes to have become familiar, and to be termed *natural*. So long as no such process can be traced and analyzed out in this manner, so long the phenomenon is unexplained, and remains equally so whatever be the number of unexplained steps inserted between its beginning and its end. The transition from an inanimate crystal to a globule capable of such endless organic and intellectual development, is *as* great a step—*as* unexplained a one—*as* unintelligible to us—and in any human sense of the word as *miraculous* as the immediate creation and introduction upon earth of every species and every individual would be. Take these amazing facts of geology which way we will, we must resort elsewhere than to a mere speculative law of development for their explanation.

"On the Strength of Stone Columns," by Mr. E. Hodgkinson.—The columns were of different heights, varying from 1 inch to 40 inches; they were square uniform prisms, the sides of the bases of which were 1 inch and 1¾ inch, and the crushing weight was applied in the direction of the strata. From the experiments on the two series of pillars it appears that there is a falling off in strength in all columns from the shortest to the longest; but that the diminution is so small, when the height of the column is not greater than about 12 times the size of its square, that the strength may be considered as uniform, the mean being 10,000 lb. per square inch, or upwards. From the experiments on the columns one inch square, it appears that when the height is 15 times the size of the square the strength is slightly reduced; when the height is 24 times the base, the falling off is from 138 to 96 nearly; when it is 30 times the base, the strength is reduced from 138 to 75; and when it is 40 times the base the strength is reduced to 52, or to little more than one third. These numbers will be modified to some extent by the experiments in progress. In all columns shorter than 30 times the side of the square, fracture took place by one of the ends failing; showing the ends to be the weakest parts; and the increased weakness of the longer columns over that of the shorter ones seemed to arise from the former being deflected more than the latter, and therefore exposing a smaller part of the ends to the crushing force. The cause of failure is the tendency of rigid materials to form wedges with sharp ends, these wedges splitting the body up in a manner which is always pretty nearly the same; some attempts to explain this matter theoretically were made by Coulomb. As long columns always give way first at the ends—showing that part to be the weakest—we might economize the material by making the areas of the ends larger than that of the middle, increasing the strength from the middle both ways towards the ends. If the area of the ends be to the area in the middle, as the strength of a short column is to that of a long one, we should have for a column whose height was 24 times the breadth, the area of the ends and middle as 13,766 to 9,595 nearly. This, however, would make the ends somewhat too strong; since the weakness of long columns arises from their flexure and increasing the ends would diminish that flexure. Another mode of increasing the strength of the ends would be that of preventing flexure, by increasing the dimensions of the middle. From the experiments it would appear that the Grecian columns, which seldom had their lengths more than about 10 times the diameter, were nearly of the form capable of bearing the greatest weight when their shafts were uniform; and that columns tapering from the bottom to the top were only capable of bearing weights due to the smallest part of their section, though the larger end might serve to prevent lateral thrusts. This last remark applies, too, to the Egyptian columns, the strength of the column being only that of the smallest part of the section. From the two series of experiments, it appeared that the strength of a short column is nearly in porportion to the area of the section, though the strength of the larger one is somewhat less than in that proportion.

Prof. Challis inquired whether Mr. Hodgkinson had found the columns to give way chiefly in the direction of the cleavages of the stone? Mr. Hodgkinson replied that he had; and that hence the same size and shape of stone cut out of the same block, required very different forces to crush them across the grain from what they did with it —Prof. Stevelly said, that it was one peculiarity of Mr. Hodgkinson's researches, that they opened up so many collateral objects of interest and wide fields of inquiry. It was easy to see that the present researches might become important to the geologist, by leading him to the source from which originated the splitting up of extended

rocks into beds and strata, and the contortions of them; for example, to some volcanic matter forced up vertically in such a manner as to exercise a crushing force upon even distant masses.—Prof. Willis showed, by examples deduced from various styles of architecture, that the ancients must have been practically in possession of similar principles; and from several examples which he gave, it would appear that columns of a shape suited to these principles were again coming into use.

Gigantic Bird.—The Secretary read a paper from Mr. Bonomi, "On a Gigantic Bird sculptured on the Tomb of an Officer of the Household of Pharaoh" "In the gallery of organic remains in the British Museum are two large slabs of the new red sandstone formation, on which are impressed the footsteps or tracks of birds of various sizes, apparently of the stork species. These geological specimens were obtained through the agency of Dr. Mantell from Dr. Deane, of Massachusetts, by whom they were discovered in a quarry near Turner's Falls. There have also been discovered by Capt. Flinders, on the south coast of New Holland, in King George's Bay, some very large nests measuring twenty-six feet in circumference and thirty-two inches in height; resembling, in dimensions, some that are descibed by Capt. Cook, as seen by him on the north-east coast of the same island, about 15° south latitude. It would appear, by some communications made to the editor of the *Athenæum*, that Prof. Hitchcock of Massachusetts had suggested that these colossal nests belonged to the Moa, or gigantic bird of New Zealand; of which several species have been determined by Prof. Owen, from bones sent to him from New Zealand, where the race is now extinct, but possibly at the present time inhabiting the warmer climate of New Holland, in which place both Capt. Cook, and recently Capt. Flinders, discovered these large nests. Between the years 1821 and 1823, Mr. James Burton discovered on the west coast or Egyptian side of the Red Sea, opposite the peninsula of Mount Sinai, at a place called Gebel Ezzeit, where for a considerable distance, the margin of the sea is inaccessible from the Desert, three colossal nests within the space of one mile These nests were not in an equal state of preservation; but, from one more perfect than the others, he judged them to be about fifteen feet in height, or, as he observed, the height of a camel and its rider. These nests were composed of a mass of heterogeneous materials, piled up in the form of a cone, and sufficiently well put together to insure adequate solidity. The diameter of the cone at its base was estimated as nearly equal to its height, and the apex, which terminated in a slight concavity, measured about two feet six inches, or three feet in diameter. The materials of which the great mass was composed were sticks and weeds, fragments of wreck, and the bones of fishes: but in one was found the thorax of a man, a silver watch made by George Prior, a London watchmaker of the last century, celebrated throughout the East, and in the nest or basin at the apex of the cone, some pieces of woolen cloth and an old shoe. That these nests had been but recently constructed was sufficiently evident from the shoe and watch of the shipwrecked pilgrim, whose tattered clothes and whitened bones were found at no great distance; but of what genus or species had been the architect and occupant of the structure Mr Burton could not, from his own observation, determine. From the accounts of the Arabs, however, it was presumed that these nests had been occupied by remarkably large birds of the stork kind, which had deserted the coast but a short time previous to Mr. Burton's visit. To these facts," said Mr. Bonomi, "I beg to add the following remarks:—Among the most ancient records of the primeval civilization of the human race that have come down to us, there is described, in the language the most universally intelligible, a gigantic stork bearing, with respect to a man of ordinary dimensions, the proportions exhibited in the drawing before you, which is faithfully copied from the original document. It is a bird of white plumage, straight and large beak, long feathers in the tail; the male bird has a tuft at the back of the head, and another at the breast: its habits apparently gregarious. This very remarkable painted basso-relievo is sculptured on the wall, in the tomb of an officer of the household of Pharaoh Shufu, (the Suphis of the Greeks.) a monarch of the fourth dynasty, who reigned over Egypt, while yet a great part of the delta was intersected by lakes overgrown with the papyrus—while yet the smaller ramifications of the parent stream were inhabited by the crocodile and hippopotamos—while yet, as it would seem, that favored land had not been visited by calamity, nor the arts of peace disturbed by war, so the sculpture in these tombs intimate, for there is neither horse nor instrument of war in any one of these tombs. At that period, the period of the building of the Great Pyramid, which, according to some writers on Egyptian matters, was in the year 2100 B. C., which, on good authority, is the 240th year of the deluge, this gigantic stork was an inhabitant of the delta, or its immediate vicinity; for, as these very interesting documents relate, it was occasionally entrapped by the peasantry of the delta, and brought with other wild animals as matters of curiosity to the great landholders or farmers of the products of the Nile—of which circumstance this painted sculpture is a representation, the catching of fish and birds, which in these days occupied a large portion of the inhabitants. The birds and fish were salted. That this document gives no exaggerated account of the bird may be presumed from the just proportion that the quadrupeds, in the same picture, bear to the men who are leading them; and, from the absence of any representation of these birds in the less ancient monuments of Egypt, it may also be reasonably conjectured they disappeared soon after the period of the erection of these tombs. With respect to the relation these facts bear to each other, I beg to remark that the colossal nests of Capts Cook and Flinders, and also those of Mr. James Burton, were all on the sea-shore, and all of those about an equal distance from the equator. But whether the Egyptian birds, as described in those very ancient sculptures, bear any analogy to those recorded in the last pages of the great stone book of nature, (the new red sandstone formation,) or whether they bear analogy to any of the species determined by Prof. Owen from the New Zealand fossils, I am not qualified to say, nor is it indeed the object of this paper to discuss; the intention of which being rather to bring together these facts, and to

associate them with that recorded at Gezah, in order to call the attention of those who have opportunity of making further research into this interesting matter"

Mr. H. Strickland remarked, that the instances of gigantic birds, both recent and fossil, enumerated by M. Bonomi, though interesting in themselves, had little or no mutual connection. The artists of ancient Egypt were wont to set the laws of perspective and proportion at defiance, so that the fact of the birds here represented being taller than the men who were leading them by no means implied the former existence of colossal birds in Egypt. Indeed, in this very painting the foot of a human figure is introduced, probably that of a prince or hero, whose proportions are as much larger than those of the birds in question as the other human figures are smaller. He considered the birds here figured to be either storks, or demoiselle cranes, or egrets, all of which are common in Egypt. The gigantic nests found by Mr. Burton on the coast of the Red Sea deserved further examination; but the size of a nest by no means implied that the bird which formed it was large also, for the Australian Megapodius, a bird not larger than a fowl, makes a nest of enormous proportions.

Savings Banks.—Mr. G. R. Porter read a "Sketch of the Progress and Present Extent of Savings Banks in the United Kingdom."—After a few preliminary remarks on their political and moral value, he stated that these institutions owed their origin to Miss Priscilla Wakefield, who in 1804 induced six gentlemen residing at Tottenham to receive deposits from laborers and servants, paying 5 per cent. as interest. Four years later eight persons, half of whom were ladies, took upon themselves the same responsibility at Bath. The first savings bank regularly organized was formed at Ruthwell, Dumfriesshire; its success led to many imitations, so that before any legislative provision had been made for their management, there were seventy savings banks in England, four in Wales, and four in Ireland. In 1817 an act was passed to encourage banks of savings in England and Ireland, but it was not extended to Scotland until 1835.

Freezing in Red-hot Iron.—"Experiments on the Spheroidal State of Bodies, and its Application to Steam Boilers, and on the Freezing of Water in Red-hot Vessels," by Prof. Boutigny.—Prof. Boutigny, who made his communication in the French language, first proceeded to show that a drop of water projected upon a red-hot plate does not touch it; but that a repulsive action is exerted between the plate and the fluid, which keeps the latter in a state of rapid vibration. At a white heat, this repulsion acts with the greatest energy, whilst it ceases, and the ordinary process of evaporation takes place at a brown-red heat. The temperature of the water whilst in the spheroidal state is found to be only 96°, and this temperature is maintained so long as the heat of the plate is kept up. To bring this water to the boiling point, (to 212°,) it is therefore necessary to cool the plate. These phenomena are explained by M. Boutigny on the supposition that the sphere of water has a perfect reflecting surface, and consequently that the heat of the incandescent plate is reflected back upon it; and some experiments have been made, which show that this is the case, the plate becoming visibly redder over those parts on which the vibrating globule played. Several experiments were made in proof of this necessary cooling to produce ebullition. The red-hot plate, with its spheroidal drop, was removed from the spirit-lamp, and after a minute or two, the water began to boil, and was rapidly dissipated in steam. Ammonia and ether were shown, although so exceedingly volatile, to act in the same manner; the ether, however, being decomposed whilst in the vibratory condition, in the same manner as it is by the action of platina wire, forming a peculiar acid. Iodine put upon the heated plate became fluid, and revolved in the same manner as other fluids, no vapors escaping whilst the high temperature of the metal was maintained; but when allowed to cool to the point of dull redness, it was immediately dissipated in violet vapors. The nitrate of ammonia fused on the glowing hot plate, and vibrated with great energy; but on cooling the capsule, the salt entered into vivid combustion. The repulsive action was shown by plunging a lump of silver at a glowing red heat into a glass of water. As long as its bright redness was maintained, there was no ebullition; but as it slowly cooled, boiling took place. In this experiment, it appeared as if the glowing metal formed around itself an atmosphere; and the contiguous surfaces of the water appeared like a silvered plate. The application of the principles involved in these phenomena to the tempering of metals was then explained. If a metal to be tempered is in a highly incandescent state, the necessary hardening will not take place on plunging it into water. It is therefore, necessary that a certain temperature should be observed. Experiments were made to show that the repulsive power of the spheroidal fluid existed, not merely between it and the hot plate, but between it and other fluids. Ether and water thus repelled each other, and water rested on and rolled over turpentine. The bursting of steam-boilers came next under consideration; and it was shown that many serious explosions may be referred to the phenomena under consideration. In a great many cases, the explosions have occurred during the cooling of the boilers after the withdrawal of the fire. An experiment was shown in proof of the view entertained by M. Boutigny. A sphere of copper, fitted with a safety-valve, was heated, and a little water being put into it it was securely corked up, and withdrawn from the lamp. As long as the metal remained red, every thing was quiet; but upon cooling, the cork was blown out with explosive violence The concluding experiment excited great interest. The production of ice in a vessel at a glowing red heat was a result so anomalous, that every one was desirous of witnessing the phenomenon for himself. It was beautifully performed by M. Boutigny, in the following manner:—A deep platina capsule was brought to a glowing red heat, and at the same moment, liquid sulphureous acid, which had been preserved in the liquid state by a freezing mixture, and some water, were poured into the vessel. The rapid evaporation of the volatile sulphureous acid, which enters into ebullition at the freezing point, produced such an intense degree of cold, that a large lump of ice was immediately formed, and being thrown out

of the red-hot vessel, handed round to the company in the section.

American Languages.—Dr. R. G. Latham "On the Ethnography of the American Languages."—He opened by explaining the extent of the Esquimaux tongues, by pointing out the character of their locality as being the one that we should naturally expect to find transitional to the Fo language of America and Asia, stated, however, that they had been cut off on both sides by broad lines of separation. These lines he considered exaggerated. Between them and the Athabascan, between the Athabascan and Coolock, between the Coolock and Oregon, between the Oregon and Californian, he could draw no definite lines. The Californian passed into the Mexican, the Mexican into those of South America. On the other hand the Curile, Corean, and Japanese tongues were akin to the Esquimaux, so were the Siberian. He was satisfied that the commonplace view was the true one; viz., that the Esquimaux languages connected the Old and New Worlds. He further added that the glossarial affinities of the Poly-synthetic tongues were as real as their grammatical analogies.

The American minister remarked that the divisions of Dr. Latham did not agree with those recognized by the American scholars. He observed that the languages of the United States were classed in eight divisions; that between these there was certainly a general affinity such as between the more distant languages of the Old World; that the difference between the American tongues was not so great as to make against the general unity of the human race: but that still it was so great as to render the processes by which alliances were shown between *them*, convertible towards showing alliances between any other languages whatever. He did not see what sense Dr. Latham gave to the word *affinity*, and desired to see the details by which the eight isolated classes were run into each other, and the particular facts by which the current divisions were broken down. The contrast between the grammatical analogy and the glossarial differences of the American tongues was generally recognized. Dr. Latham, however, instead of explaining it, denied its existence.—Dr. Latham replied, that he had abstained from details merely on the score of time; that he would now enter on them but briefly; that he must be excused if he supposed that they were but partially acquainted with the details of transatlantic scholars in this department, but that he would now take up the subject in special regard to the attention which the honorable minister had paid to his statements from the point where they had left it. He differed with Gallatin and others, but he owned that he combated them with weapons which they themselves supplied. He spoke with praise upon the pains taken by the American War Department to procure the Indian vocabularies. In respect to the Natchez, Uche, Attacapa, Adaine, and Chetimacha vocabularies, he believed that Gallatin himself only meant his groups to be *provisional*. The division, however, between the Algonquin and Iroquois groups was considered real. This he broke down. Both were allied to third languges, *e. g.* the Eskimo. Both could be shown allied to each other, if we dealt with many dialects *en masse*. The Cherokee was Caddo, and as such Catawba also. The question between the Creek and the Choctah tongues, was one of definitions only. Exceptions might be taken to his modes of indirect and collective comparison, but he believed them to be legitimate and recognized instruments of criticism.

Lord Rosse's Telescope.—"On the Nebula 25 Herschel, or 61 of Messier's Catalogue," by the Earl of Rosse.—Lord Rosse exhibited to the Section what he called his working plan of this nebula, and explained his method. He first laid down, by an accurate scale, the great features of the nebula as seen in his smallest telescope, which, being mounted equatorially, enabled him to take accurate measurements; he then filled in the other parts, which could not be distinguished in that telescope, by the aid of the great telescope, but as the equatorial mounting of this latter was not yet complete, he could not lay these smaller portions down with rigorous accuracy; yet as he had repeatedly gone over them, and verified them with much care, though by estimation, he did not think the drawing would be found to need much future correction

Sir J. Herschel said he could not explain to the Section the strong feelings and emotion with which he saw this old and familiar acquaintance in the very new dress in which the more powerful instrument of Lord Rosse had presented it. He then rapidly sketched on a sheet of paper the appearance under which he had been accustomed to see it, which was a nucleus surrounded by a ring-shaped nebulous light, with a nebulous curve stretching from one part of the ring to nearly the opposite. This had very strongly suggested to his mind what our system of stars, surrounded by the milky way, dividing into its two great branches, would appear if seen from a sufficient distance. But now this nebula is shown in such a way as greatly to modify, if not totally to change, former impressions. In the first place, under the examination of the more powerful instrument the nucleus became distinctly resolved into its constituent stars, which his telescope was not powerful enough to accomplish; and it now turned out that the appearance which he had taken for a second branch of the ring, was a nebulous off-shoot, stretching from the principal nebula, and connecting it with a neighboring much smaller one. This was to him quite a new feature in the history of nebulæ. The general appearance of the nebula, as now presented, strongly suggested the leading features of the shell of a snail rather than a ring. He felt a delight he could not express when he contemplated the achievements likely to be performed by this splendid telescope; and he felt no doubt that, by opening up new scenes of the grandeur of creation, it would tend to elevate and ennoble our conceptions of the great and beneficent Architect; the raising of our thoughts to whom should be the aim of all our researches, as the advancing of our knowledge of Him, and the grateful tracing of the benefits and blessings with which He has surrounded us, was the noblest aim of all that deserved the name of science.

Heat of Solar Spots.—"On the Heat of the Solar Spots," by Prof. Henry, of Princeton College, New Jersey.—Sir D. Brewster read an ex-

tract of a letter which he had just received from Prof. Henry, who had recently been engaged in a series of experiments on the heat of the sun, as observed by means of a thermo-electrical apparatus applied to an image of the luminary thrown on a screen from a telescope in a dark room. He found that the solar spots were perceptibly colder than the surrounding light surface. Prof. Henry also converted the same apparatus into a telescope, by placing the thermo-pile in room of the eye-glass of a reflecting telescope. The heat of the smallest cloud on the verge of the horizon was instantaneously perceptible, and that of a breeze four or five miles off could also be readily perceived.

Fog Rings.—"On Fog-rings observed in America," by Sir D. Brewster.—This paper had been communicated to Sir D Brewster by Sir John P. Boileau, respecting a fog bow which had been seen in January, 1808, by Sir George Ross, when off the Montgomery Reach, in the Potomac, in Virginia Early in the morning a milk-white fog came on, so thick that the captain of the packet found it necessary to anchor, not knowing where he was. About half-past eleven he came up to Sir George, and remarked that they should have all clear soon, "for the fog-eater was come." The captain explained himself by pointing to the head of the vessel, where there was visible a ring of thicker white fog than that in which they were enveloped, apparently about 60 feet in diameter, the belt of the ring appearing about 2 feet broad. Within this ring was another, 2 feet in diameter, suspended in its centre, and with prismatic colors. It lasted about 20′ or 30′, when the fog cleared away. There was a severe frost on the following day.

Sounds under Water.—"On the sounds produced by one of the Noonectidæ under Water," by Mr. Ball.—He stated, that the fact having been mentioned to him some two years since, he had not had an opportunity of testing the observation until within the last few days, when a specimen was brought to him in an ordinary jelly glass; it was, he believed, the *Corrixa affinis*. When suspended in the water, about four inches below the surface, it emitted three short chirrups, and then a long, cricket-like sound. It appears, the sounds are emitted in the evening and night, and are so loud that they may be heard in an adjoining room, and are continued during the night. Mr. Ball stated, that time did not permit him to make any accurate observation; but he thought the matter so curious, that he noticed it with the view of attracting the attention of entomologists, in the hope of obtaining an explanation of the manner in which this noise is produced under water.

Model of the Moon.—Sir J. Herschel exhibited a model of the globe of the moon in relief, expressing the form and elevations of its mountains as seen in a good telescope. This beautiful and exquisite work he stated to be the performance of a Hanoverian lady, Madame Witte; modelled by her from actual observation through an excellent Fraunhofer telescope, in a small observatory at the top of her own dwelling-house; the selenographical positions and general contours of the principal craters and other leading features being first laid down on the smooth surface from Messrs. Beer and Maedler's micrometrical measures and charts. The diameter of the model is 12 inches 8¼ lines (Rhienland measure), or one 10,000,000th part of the moon's actual diameter. The scale of heights is, however, necessarily enlarged to double this amount, as otherwise the relief would be too low for distinctness. The material is a composition of mastic and wax, and the whole is worked out in such perfection of detail as to represent *every* visible crater and mountain peak—nay, even the minuter lines of elevation which streak the so-called seas, &c, in their true forms and conventional proportions. In consequence, when properly illuminated, and placed at 30 or 40 feet distance, and viewed through a good telescope, the artificial is scarcely distinguishable from the real moon. The delicacy and precision of the work can only be appreciated by a microscopic examination. In fact, the whole model is stated by Madame Witte to have been executed with the aid of magnifying glasses. Sir J. Herschel accompanied his explanation of this model with several remarks on the physical constitution of the moon in respect of climate, atmosphere, moisture, &c., and compared its surface with the chart of part of Mount Etna, lent him for that purpose by Baron von Waltershausen, and with a drawing of his own of one of the principal craters as seen in his 20-feet reflector—placing the volcanic character of the ring mountains beyond all doubt. By the aid of a large chart by Messrs. Beer and Maedler, several of these, such as Aristarchus, Tycho, Kepler, Copernicus, &c., were pointed out, and their peculiarities described—their places on the model being fixed by the aid of brass circles, representing the moon's equator and meridians. This work, it is understood, will be submitted to the inspection of the Astronomical Society, on the resumption of their meetings in November. Speaking of the climate of the moon, Sir J. Herschel considered as probable the attainment of a very high temperature (far above that of boiling water) by its surface, after exposure to unmitigated and continual sunshine during nearly a whole fortnight. The moon therefore, when at the full, and for a few days after, must be, in some small degree, a source of heat to the earth; but this heat, being of the nature rather of culinary than of solar heat, (as emanating from a body below the temperature of ignition,) will never reach the earth's surface, being arrested and absorbed in the upper strata of an atmosphere where its whole effect will necessarily be expended in the conversion of visible cloud into transparent vapor. The phenomenon of the rapid dissipation of cloud (in moderate weather) soon after the appearance of the full moon, (or of a moon so nearly full as to appear round to the unassisted eye), which he stated himself to have observed on so many occasions as to be fully convinced of the reality of *a strong tendency in that direction*, seemed to him explicable only on this principle. On the conclusion of Sir J. Herschel's explanation, Baron von Waltershausen entered into further particulars of the nature of the volcanic phenomena on the surface of Etna, as represented in the elaborate chart above alluded to, of the environs of Nicolosi, and pointed out many particulars of resemblance to the lunar volcanoes.

Mr. Lyell described the appearance he had noticed on the shore of the Bay of Fundy, where the tide rises and falls 60 or 70 feet, leaving extensive surfaces of red mud, which after a succession of low tides became baked by the sun and filled with cracks, so that slabs can be taken up and examined: upon these he found impressions produced by a shower ten days before, ripple marks, and the foot-prints of a sand-piper. The lamination of the sand represented successive tides, and when split open exhibited similar markings to the first. One of these slabs he had presented to the British Museum, where it was exhibited in illustration of the slabs of red sandstone, with fossil foot-prints of birds, from Connecticut.

Subsidence of the Land.—"On the subsidence of the land at Puzzuoli," by J. Smith, Esq.—When the writer visited the temple of Jupiter Serapis at Puzzuoli, in March, 1819, its floor was elevated about six inches above the level of the sea; but on the 11th of May in the present year, it was covered to the depth of 18 inches at low water, and 28½ at high tide; the sea being calm at the time. The *custode* of the building told Mr. Smith that this change was progressive, amounting to 1¼ English inch per annum. The *cicerone*, too, who had exercised his profession for 30 years, said he knew a difference of at least 3 feet six inches in the height of the sea upon the piers of the Bridge of Caligula, giving the same amount of subsidence yearly. There were, besides, many similar proofs in the partly submerged houses and causeways of Puzzuoli. The perforations of the Pholades in the columns indicate a former period, during which the temple remained submerged at a stationary level; and contemporary accounts state that, by an instantaneous movement, it was lifted to some height above the sea, which receded nearly 200 spaces, leaving an immense quantity of fish, which were collected by the inhabitants. This took place in October, 1538, immediately before the elevation of Monte Nuovo.

Aurora Borealis.—"On the Origin of the Aurora Borealis," by the Rev. G. Fisher.—The author professes to establish the following proposition: "The principal displays of the aurora occur near the edge or exterior limits of the frozen sea, where the process of congelation goes on with the greatest rapidity. The aurora is an electrical phenomenon, and arises from the positive electricity developed by the congelation of humid vapors and the consequent induced negative electricity of the surrounding portions of dry atmosphere. It is the accompanying indication of the restoration of the electrical equilibrium, which is effected by the intervention and conducting power of minute frozen particles, which particles are rendered luminous by the transmission of the electricity, and thereby give rise to the phenomenon of the aurora."

Mining Accidents.—Prof. Faraday said, the subject of mining accidents had long occupied his attention. The more he pursued the inquiry, the more he was disheartened at the apparent hopelessness of finding out any good general remedy. The explosions were not simply the effects arising from the mixture of gases, but from the combustion of the coal-dust and coal-gas which the first explosion made. In the fatal case at Haswell, the place where the accident originated had been ascertained; and the progress of the fire could be traced on the scorched beams and props of the galleries, and the deposits of coke made from the coal-dust which the explosion raised. To this circumstance the great force of the explosion was due, and not to the first escape of gas. A similar explosion had been known to take place in a cotton-wadding manufactory, the whole atmosphere of the place being fired by means of the particles of cotton in it. The great source of danger was the mental condition of the miners. With regard to the present race this was so hopeless, that nothing could be done for them; although smoking was strictly forbidden, they had been known to contrive to light their pipes in dangerous workings even from the Davy lamp; and Mr Faraday had himself on one occasion sat down with an open candle to watch the preparations for blasting, and when he inquired for the gunpowder was told he was sitting on it. Mr Faraday took an opportunity, also, of expressing his firm conviction of the safety of the Davy lamp when properly used, and of its being a complete and practical contrivance, to which he would willingly trust his own life, as he had already done on many occasions.

Germination of Seeds.—"On the Influence of Galvanic Electricity on the Germination of Seeds," by Prof. E. Solly.—In a series of experiments, in which the seeds of barley, wheat, rye, turnips and radish were exposed to the influence of a feeble current of electricity, the plants came up sooner and were healthier than others that had not been electrified. On the other hand, a number of experiments on other seeds had given opposite results—proving, either that the germination of some seeds was retarded, whilst that of others was facilitated by electricity, or that the effects observed in both cases were accidental.—Out of a series of 55 experiments on different seeds, 21 appeared in favor of electricity, 10 against it, and 25 showed no effect whatever; and in carefully counting the whole number of seeds in the entire series, there were found 1,250 of the electrified, and 1,253 of the non-electrified. In conclusion, Prof. Solly stated that he felt doubtful whether the effects observed were really due to the influence of electricity.

Queen Bees.—Mr. Westwood made some remarks on Entomology.—After shortly noticing the general economy of the hive bee as to the production of queens and the swarming of casts, he contended, from the analogy between the circumstances connected with the latter event and those which accompany the swarming of ants, gnats, white ants, mayflies, &c.—1st, That the swarming of insects has for its principal object the union of the sexes; 2d, That, from analogy with other insects subject to swarming, it is to be inferred that that species does not differ in this respect from other swarming species; and, 3d, That it is the newly hatched, and not the old queen which leads off the swarm.

Remarks on Shooting Stars. By M. Coulvier-Gravier.—Hitherto, says the author of the memoir, shooting stars have not been the object of observation sufficiently regular, and continued during a time sufficiently long, to enable any general law to be obtained. It is true, it has been supposed to be ascertained that there are determinate epochs in which these meteors appear infinitely more numerous than on ordinary occasions; but the periodical returns to which they had been thought subjected begin to appear problematical, and perhaps they never would have been admitted, had, in the first instance, an endeavor been made to ascertain the apparitions every night of the year. A labor like this, it is true, would have been very wearisome, and doubtless it is this which has discouraged observers. For my own part, occupied since 1829, with researches of this kind, to which I devoted myself with a particular object, I have since pursued them for themselves, and since 1841, I have kept regular registers of my observations. For this purpose I found it necessary to avail myself of the assistance of M. Chartiaux, who observes one half of the heavens whilst I am engaged with the other; I write down each apparition myself, as well those which my assistant announces with a loud voice as those which I see myself. In this manner it is impossible to make a double entry, which, on the contrary, is almost inevitable when, several persons observing at once, each separately notes that which he perceives in the portion of the sky which is allotted to him. I might perhaps thus explain the extraordinary number noted by four persons who simultaneously observed in the same place.

In general, observers have chosen their time to make these researches; with respect to us, it is only a clouded sky that can interrupt our observations, to which we return, whatever may be the hour of the night, whenever the state of the sky permits. My registers furnish me, from the month of July 1841 to the month of February 1845, with 5302 shooting stars observed in 1054 hours. I have grouped, in the different tables which my memoir contains, these observations, so as to be able to deduce from them results relative to the greater or less frequency of these meteors according to the hours of the day, months, and years. With reference to this last point, I do not pretend to draw any conclusions from researches which do not extend in a regular manner beyond four years; but for the horary and mensual variations, I believe that I have already succeeded in ascertaining two general laws. Thus, in each month comprised between the winter and summer solstices, the mean number of shooting stars for one hour is sensibly the same; and this also takes place during the six other months; but with this difference, that for the latter the mean is nearly double what it is for the others, and the change is effected, as it were, without transition. For the horary variations, on the contrary, there is a gradual change; and from six o'clock in the evening, which is the hour of the minimum, the number of apparitions continue to increase until six o'clock in the morning, which is the moment of the maximum.

In the second part of his memoir the author occupies himself with the directions of the shooting stars. The distribution of 1000 of these meteors relatively to the sixteen angular spaces into which he divides the horizon, proceeding in the order north, east, south, west, is as follows:—74, 90, 82, 91, 114, 86, 70, 79, 63, 34, 29, 28, 33, 28, 35, 64; which shows that a much greater number of stars proceed from the east than from the west, and nearly as many from the north as from the south. The author thinks that the difference between the number of stars observed in the two directions, east and west, is due to the double movement of the earth.

There are mensual variations somewhat difficult to determine. In winter, the influence of the south is the greatest possible; in summer, the influence of the north is most sensible. As to the influence of the east, it is the weakest in summer, and the strongest in spring and autumn. The horary variations are more decided. The north directions are more numerous towards midnight, and least in the morning; as to the east, they are most numerous in the morning, and least in the evening; from the south they are most frequent in the morning; lastly, from the west there are more in the evening.

In the third part of his memoir, the author first occupies himself with the magnitudes of the shooting stars; he calls every meteor which presents a sensible disc a *shooting globe*, and reserves the name of *shooting stars* to the meteors which have an aspect analogous to the fixed stars and planets. He calls them of the first magnitude when they have the brilliancy of Venus or of Jupiter; of the second magnitude when they resemble fixed stars of the first magnitude, and so on. Among 5302 meteors, the author has counted 8 shooting globes, and 80 shooting stars of the first magnitude; whence it follows, that if no obstacle were opposed, an observer would see one shooting globe per week, and one shooting star of the first magnitude every night of eleven hours.

Shooting stars have generally the same color as the fixed stars. Sometimes this color changes to yellow, then to bluish and to greenish, in proportion as the meteor approaches the horizon. Among all these meteors there are some which are red, which move slowly, and have a globular form analogous to that of a billiard-ball colored red. The author thinks that they play a particular part. Lastly, he distinguishes others which become extinguished at the moment of their greatest brilliancy, as if they were plunged in a mass of water.

With respect to the trains which some stars leave behind them, they cannot be compared with smoke, but rather with a shower of sparks analogous to that of rockets. The train commences and terminates with the star which has produced it, but it persists one or two seconds after the disappearance of this star. Sometimes the star breaks into fragments, which succeed the train, and which vanish almost as soon. A star is never accompanied with noise, whether it remains simple, produces a train, or breaks into fragments. In general the path of a shooting star is rectilinear, or rather in the arc of a great circle. The author has seen fifteen whose paths have been curvilinear.

At the conclusion of his memoir the author has given a catalogue of the most remarkable shooting stars, with the indication of the characters they have presented. Before passing to the theoretical part, he announces some historical researches on the subject.—*Lit. Gaz.*